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THESIS

A LOOK AT TODAY'S ENLISTED WOMAN IN THE NAVY

by

Deborah Y. Kamin

and

Paula K. Sutherland

December 1981

Thesis Advisor: Richard S. Elster

Approved for public release: distribution unlimited

T202296

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER

2. GOVT ACCESSION NO.

3. RECIPIENT'S CATALOG NUMBER

4. TITLE (and Subtitle)

A Look at Today's Enlisted Woman in the Navy

5. TYPE OF REPORT & PERIOD COVERED
Master's Thesis
December 1981

6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)

Deborah Y. Kamin and Paula K. Sutherland

8. CONTRACT OR GRANT NUMBER(s)

9. PERFORMING ORGANIZATION NAME AND ADDRESS

Naval Postgraduate School
Monterey, California 93940

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS

11. CONTROLLING OFFICE NAME AND ADDRESS

Naval Postgraduate School
Monterey, California 93940

12. REPORT DATE
December 1981

13. NUMBER OF PAGES
165

14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)

15. SECURITY CLASS. (of this report)
Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release: distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Navy enlisted females, attrition, sea/shore commands, traditional/
non-traditional ratings.

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

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DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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A Look at Today's Enlisted Woman in the Navy

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MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1981

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ABSTRACT

Declining pools of service-eligible men and increasing demands upon military manpower have forced the armed services to consider expanding the role of military women. The success or failure of increased utilization can only be determined through an assessment of actual data. Without such information, policy becomes arbitrary and successful gender integration less likely. Using the Survival Tracking File (longitudinal) as a primary source of data, the Total Population of Navy enlisted females, both Attrites and those on active duty (beginning fourth quarter FY 1977 and ending third quarter FY 1981), were examined to identify emerging trends. Frequency distributions and regression analyses revealed certain trends which warrant further investigation. The E-1 attrition rates in boot camp would suggest a need for better screening of applicants, and the major contribution of General Detail personnel to overall losses suggests further investigation of in-service working conditions and jobs as predictors of attrition.

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I. INTRODUCTION

A. PROBLEM AND PURPOSE

Totally exasperated with Eliza Doolittle, Professor Higgins, in the movie, "My Fair Lady," shouts, "Why can't a woman be more like a man?!" While the list of reasons may be unending, many of the differences might be more perceived than actual. The Navy, and the military in general, has had to turn more and more to womanpower to meet ever-increasing demands upon military manpower. Declining birth rates during the 1960's and 1970's as well as fierce competition for young talent among civilian employers and universities have made military recruiting goals difficult to meet. Maintaining a large standing peacetime military on an all-volunteer basis has forced the issue of alternative sources for manpower. The move for Equal Rights Amendments as well as increasing numbers of women seeking employment has led to expanded roles for women in both military and civilian occupations.

There are those, like Professor Higgins, who feel significant differences exist in the professional potential of men and women. More conservative voices have expressed concern over the expanded role of women in the military, warning that it may lead to a force which is only marginally capable of defending our national interests. Others, just as vocal, accuse the military of dragging its feet when it comes to gender integration. It is true that Congress has upheld restrictions concerning women in combat, but, as Martin Binkin observes, "More limiting are the set of policies established by the military services themselves based

on their own interpretations of the national will as expressed through Congress. Together, these laws and policies relegate women to a minor role." [Ref. 1]

Whether their role will be major or minor, the presence of women in the military will be an issue. The purpose of this thesis is to describe the Navy enlisted female and the issues associated with her integration into the active duty Navy forces. A clear understanding of who she is, where she is being utilized, and why she attrites can lead the way to more intelligent discussion of problems and solutions. Determining whether or not women in the Navy is a successful venture cannot be accomplished without knowledge of current practices, problems, and emerging trends. It is hoped that the following pages will provide some of that information.

B. HISTORY AND BACKGROUND

In 1928, Major Everett S. Hughes, U.S. Army, launched a study based on the premise that in future conflicts women would inevitably play a major role. Resulting recommendations, called the Hughes Plan, suggested that women serving overseas or in dangerous zones be militarized and integrated into the men's army with similar uniforms and privileges. Twice the proposal was submitted to the Army Chief of Staff with less than enthusiastic response:

> "A dejected-looking sheaf of handwritten scraps of paper indicate that the studies were carried back and forth from G-1 [Personnel] to the Chief of Staff to the Secretary of War to G-1, bearing notations of diminishing intensity, such as 'Hold until Secretary of War decides;' 'Hold until fall when women return to their homes after summer activities;' and finally, merely 'Hold.'
>
> "The last one in the series, dated 5 January 1931, stated 'General B. [Brigadier General Albert J. Bowley] says may as well suspend; no one seems willing to do anything about it.'" [Ref. 1]

Historically, the military's utilization of women has been characterized by a sort of crisis intervention. During war, women have been called to fill administrative positions in order to free men for combat-related duties. With the end of the crisis would come demobilization of women and, once again, an all-male military organization.

The first females accorded any military status within the Navy were nurses. With the establishment of the Navy Nurse Corps in 1908, uniformed women provided medical assistance in the continental United States and aboard two transport vessels, U.S.S. MAYFLOWER and U.S.S. DOLPHIN [Ref. 2]. Yeomen (F), or "Yeomanettes" as they were called, served during World War I as telephone operators, clerical workers, typists, and stenographers, and were the first women to receive full military rank and status [Ref. 1]. Again, with the close of the war, came an end (with the exception of the nurses) to female involvement in the military.

It was during World War II that women began to demonstrate in larger-than-ever numbers their competence in a number of occupations. The shock of Pearl Harbor jolted a reluctant Bureau of the Budget into approval of the Women's Army Auxiliary Corps (WAAC), Women Accepted for Voluntary Emergency Services (WAVES), and the Semper Paratus, Always Ready (SPARs). Although still mostly administrators of health care or clerical fill-ins for men called to combat, some of the 350,000 women served as airplane mechanics, parachute riggers, gunnery instructors, and air traffic controllers; some even ferried combat aircraft. Perhaps one of the greatest compliments paid to the contribution of women during World War II was that of Albert Speer, Adolph Hitler's weapons production chief:

"How wise you were to bring your women into your labor force. Had we done that initially, as you did, it could well have affected the whole course of the war. We would have found out, as you did, that women were equally effective, and for some skills, superior to males." [Ref. 1]

Despite such glowing reports, the end of the war once again saw an end to the recognized importance of women in the military. Rapid demobilization during the post-war years and the lapse of the draft in 1947 resulted in a military unable to meet its strength levels with only male volunteers. Here was yet another crisis prevailing upon the contribution of womanpower and in 1948, President Truman signed the Women's Armed Services Integration Act (Public Law 625) authorizing women as members of the regular Army, Navy, Air Force, and Marine Corps [Ref. 2]. Although a breakthrough for women, the law imposed certain restrictions:

1. Women officers could not hold permanent commissions above the rank of Commander.
2. Women could not compose more than two percent of total enlisted strengths.
3. Children of military women were not to be considered dependents unless the father was deceased or unless the mother was the principal means of support.

Congress, at the time of Public Law 625, issued Public Law 6015 which further restricted women from duty in combat vessels. Such restrictions resulted in minimal utilization of women in the Navy and, in fact, during the 1950's, women accounted for only 1.5 percent or less of Navy strengths.

The Vietnam conflict presented another crisis which forced Congress to increase the role of military women. A Department of Defense task force which was formed to reassess the role of military women resulted in Public Law 90-130:

1. The two percent ceiling on female enlisted strength was eliminated.
2. Promotion opportunity to the grade of Captain was initiated.
3. Appointment of women to flag rank was made possible. [Ref. 2]

Aside from escalating involvement in Southeast Asia, a changing social and political climate in the United States began to affect the use of women in the armed services. Low birth rates in the 1960's had resulted in declining pools of service-eligible (or interested) young men, and in 1972, the establishment of an all-volunteer force (AVF) further highlighted military manpower shortages. The services had to look for alternative sources of manpower.

Something was also happening to the attitude of the American woman. She began to voice a growing discontent with the proverbial "barefoot and pregnant" image and was no longer willing to settle for only traditionally female jobs with less-than-equal pay or opportunity for advancement. Female activism in the 1970's, as well as several civil suits and a progressive Chief of Naval Operations (Admiral E. R. Zumwalt), combined to expand the role of Navy women. The force of 5,000 was increased to 20,000. Females gained entrance to most Navy enlisted ratings, and, for the first time, women were allowed to assume command at shore. Between 1972 and 1976, the percentage of women occupying non-traditional jobs rose from 9.4 percent to 40.2 percent and, in 1975, military academies opened their doors to women [Ref. 3].

Today's rapidly advancing technology has not only created a need for more highly skilled military personnel, but also has diminished the proportion of occupations requiring heavy physical labor; the trade-off is now between capital and labor, brain and brawn. With physical

differences between men and women a diminishing issue in many areas, many or most restrictions concerning women may no longer be valid, making their increased use within the military highly desirable.

The expanded role of women in the military has raised a number of questions which have ultimately become issues. Problems concerning effectiveness of mixed-gender forces and the cost of accommodating increased numbers of women arise time and again. Binkin and Bach observe:

> "The effectiveness of military forces depends largely on individual capabilities, group performance, and the public image abroad. . . . A healthy measure of uncertainty remains about how greater female participation would affect all three. Until appropriate yardsticks are developed for each of them, predictions are highly speculative." [Ref. 1]

The past provides us with little in the way of yardsticks. Historically, participation of women in the military has been sporadic and is of minimal assistance in determining their success as major contributors to today's armed forces. The story has been largely one of struggle to allow any participation at all and, in recent years, of making that participation equitable. The late 1970's and early 1980's have provided many opportunities for women. The problem now before analysts is to investigate recent data in an attempt to identify what effect these opportunities have had, not only upon the women themselves, but also upon the military in general.

The last five years has seen a tripling of the number of women in the armed forces; they presently make up over 13 percent of the active duty Navy enlisted population. Such a tremendous growth cannot happen without certain sociological and economic issues arising. The "increases in the number of women and the numbers and types of jobs they perform in the Navy require Navy policymakers to identify and deal with a number of

new issues and additional research requirements." [Ref. 4]. These research requirements must begin to address areas which will be helpful in selecting and retaining women for service in non-traditional jobs or at sea-based commands. Exploring those demographic, pre-service, and in-service characteristics distinguishing women in traditional versus non-traditional ratings, women who stay versus those who attrite, and women who desire to serve on ships versus those who do not will give our policymakers a better basis for screening criteria [Ref. 3]. Without such information, analysts can only rely upon assumptions:

> "Women are irrational, that's all there is to that. Their heads are full of cotton, hay, and rags. They're nothing but exasperating, irritating, calculating, vascillating, maddening, and infuriating hags!"
>
> Is that so, Professor Higgins...?

II. METHODOLOGY

A. DATA BASE

The Enlisted Survival Tracking File (STF) is a comprehensive source of Navy enlisted longitudinal personnel data. The STF provided the data base for the following analyses. Data used in the construction of this file were derived from the end-of-quarter Enlisted Master Record (EMR) and the quarterly Audit-Trail File, both of which are documented in the Navy Manpower and Personnel Information System (MAPMIS) manual.

The Navy Personnel Research and Development Center and Bureau of Naval Personnel (now Naval Military Personnel Command) collaborated in the development of the Survival Tracking File. The purpose was to establish an "ongoing survival rate" report for analyzing enlisted force continuation behavior.

The STF is comprised of two parts: one, the longitudinal file (STF-L), and the other a biographical file (STF-B). For purposes of the following analysis, only the STF-L was used (see Appendix A for a complete listing of the STF-L variable elements). The longitudinal Survival Tracking File consists of sequences of fixed-length records representing the status of all Navy enlisted personnel at quarterly intervals. All records pertaining to one individual occur consecutively and in chronological order. Each record represents the status of an individual with respect to data elements on the file; updates occur at the end of a quarter. When the status of an individual does not change from quarter to quarter, a counter is incremented indicating that the contents of

the record relate to more than one quarter. When changes do occur, the counter reverts back to one and advances by one each quarter until another change in status occurs.

The STF records currently available commence with the fourth quarter of Fiscal Year 1977 and end on 30 June 1981. In other words, the file contains a complete longitudinal description of enlisted history for all individuals who accessed during fourth quarter FY 1977 through third quarter FY 1981. Data will remain on the file indefinitely regardless of when or why an individual leaves the naval service [Ref. 5].

The Defense Manpower Data Center (DMDC) provided data on the characteristics of attriting Navy enlisted males who had entered the Navy in Fiscal Year 1978.[1] DMDC had summarized this information from accession files originated by the Military Enlisted Processing Command and from separation files originated by the Navy Military Personnel Command. The characteristics of enlisted Navy males included their Race, Education (High School/Non-high School), Mental Group, Term of Enlistment, Length of Service, and Separation Codes [Ref. 6].

B. SAMPLE

To identify those characteristics which may affect survivability or attrition, Navy enlisted females (including those who eventually attrited and those who were on active duty) were studied. In order to provide a more detailed description within more than one time frame, the data base was organized into two groups. Initially, enlisted women

---

[1]These data were from FY 1978 through FY 1980--the only time frame available.

were examined as recruits. This was accomplished by utilizing the first records of all enlisted women who had entered the Navy from March 1978 through June 1981. Subsequently, the Total Population of enlisted women was analyzed by selecting last records of individuals who were on active duty or who had attrited from fourth quarter FY 1977 through third quarter FY 1981 (the most current date available through the Survival Tracking File). Causes for attrition were those defined by the Women's Program Branch of the Chief of Naval Operations (OP-136) (Table 1).

C. LIMITATIONS

Although potentially a powerful analytical tool, the Survival Tracking File has certain constraints which limit its capabilities. While the status of an individual may change at any point, a certain amount of lag time is involved in recording the new information. Updating of records normally occurs at the end of each quarter. However, if an individual changes status during that time, the information may not find its way to the file until the end of the following quarter. Consequently, information available for study may not reflect accurate status reports. The analysis most affected by this limitation was that of the Recruit Population. By the time the individual has been entered on the STF, she may have completed boot camp and possibly even had a change of status. Changes which occurred during the time preceding entry of a first record may not be reflected until at least a quarter later.

A second constraint concerned the volume of missing data. The number of missing values ranged from zero in some cases to as many as 26,748 in the case of the Dependency variable for women recruits. With such a large number of missing values, any analysis must be held as suspect.

TABLE 1

Causes of Attrition

Categories
Death
Personality disorders
Alcohol/drug involvement
UCMJ/other court involvement
Burden to command
Fraudulent enlistment
Homosexual activity
Inaptitude
Apathy
Good of the service
Erroneous enlistment
Disability discharges
Pregnancy
Other medical discharges
Hardship
Promotion to officer status
Miscellaneous
Security program
Consientious objection
Non-support of dependents
Unsanitary habits
Debtors
Sexual perversion
Shirking
Financial irresponsibility
Aberrant tendencies
Absence greater than one year

A third constraint was out-of-date documentation for the Survival Tracking File. In many cases, values for variables were either undefined or no longer considered valid. Information concerning coding or definitions of variable categories was at best fragmented. Maintenance of the Survival Tracking File and its elements reflected little continuity or standardization. For example, many AFQT percentiles on the file do not reflect the 1980 renorming procedure, nor is the discrepancy noted in the

documentation. The user must carefully consider all variables analyzed so that results of analysis are discussed in terms of generally accepted standardized definitions. For this reason and to avoid confusion, those variable codes which were unclear, no longer valid, or undefined were treated as missing values.

A further constraint was that it was impossible to isolate a specific time frame on the Survival Tracking File. This limitation affected the comparison of Navy enlisted males and females who had entered the Navy in FY 1978. Since the Navy enlisted male information available from the Defense Manpower Data Center was for the period beginning FY 1978 through the end of FY 1980, a comparison of data with an identical time range for enlisted Navy females would have been optimum. Since this was not possible, the FY 1978 Navy male enlisted cohort was compared to a FY 1978 Navy female enlisted cohort which contained three additional quarters of information (through third quarter FY 1981).

D. ANALYSIS

The total number of women (N = 53,466) listed on the Survival Tracking File was divided into two groups: women recruits (N = 32,225)[2] and women in the Total Population (N = 43,179)[3]. This was accomplished utilizing five FORTRAN programs (Appendices B through F) written especially for this purpose.

---

[2]The Recruit Population includes only those women who accessed from March 1978 through June 1981.

[3]The Total Population includes only those women on active duty or who had attrited from fourth quarter FY 1977 through third quarter FY 1981. Of the total STF contents of 53,466 women, 10,287 either retired or left the Navy at the end of obligated service and are not used in this study.

The Total Population was subdivided into those enlisted women on active duty (N = 33,322) and those enlisted women who had attrited (N = 9,857). The two subpopulations were then reexamined in order to gauge the effects of assignment, sea and shore, and ratings, both traditional and non-traditional. Figure 1 outlines the breakdown, Table 2 lists the types of duty defined as sea or shore, and Table 3 documents the Traditional and Non-traditional Ratings as defined by the Women's Program Branch. Eight groups (the only group not evaluated was the 53,466 total number of enlisted women) were evaluated in terms of traditional, non-traditional, and other variables as described in Tables 4, 5, and 6, respectively. This was done in order to observe the effect, if any, of these variables upon the survivability of an enlisted woman.

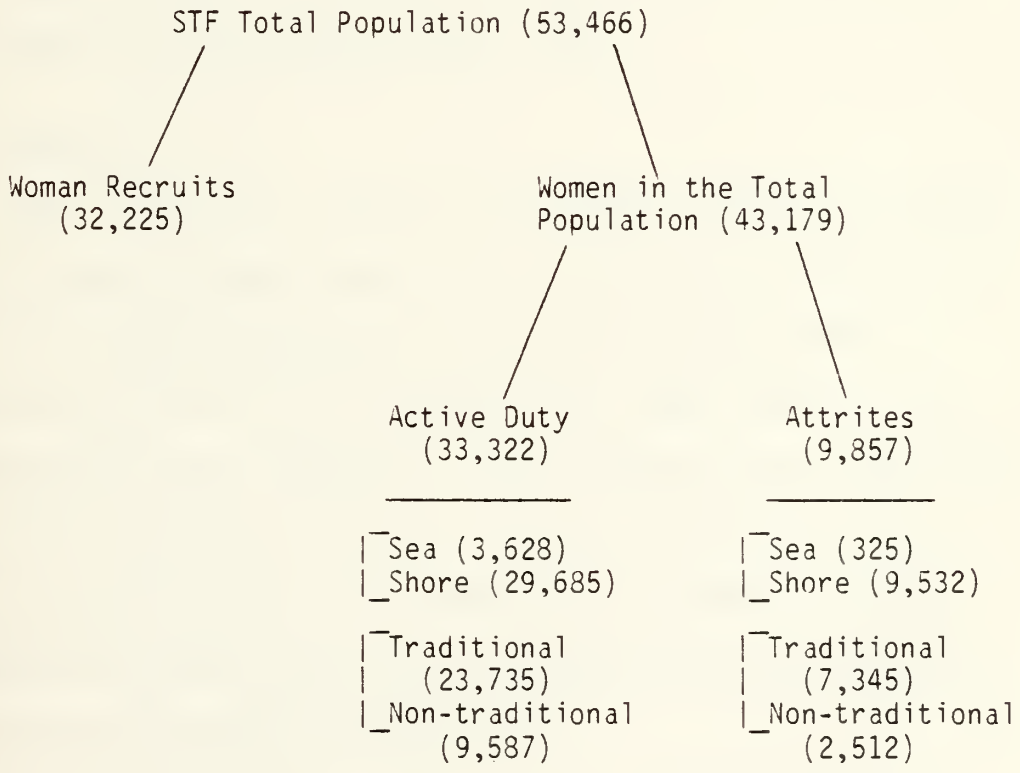

Figure 1. Breakdown of Navy Enlisted Women Population.

TABLE 2

Types of Duty

SEA	SHORE
Sea Duty	Shore Duty
Overseas Duty	Neutral Duty
Toured Sea Duty	Preferred Overseas Shore Duty

In order to compare a male and female cohort and to conduct further analyses, the Total Population was further subdivided into three groups: enlisted women in the E-1 paygrade; enlisted women who were designated as either Seamen, Seaman Apprentices, or Seaman Recruits; and those enlisted women who had accessed during FY 1978.

E. DATA ANALYSIS

The overall description of Navy enlisted female recruits, the Total Population of Navy enlisted women (Stays plus Attrites), Navy enlisted women on active duty, and Navy enlisted women who had attrited was developed using the Statistical Analysis System (SAS) [Ref. 7]. Frequency distributions were gathered for each population over traditional, non-traditonal, and other variables as listed in Tables 4, 5, and 6.

Because they are generally of interest to policymakers, reasons for discharges were tabulated for the enlisted women who had attrited. This was done using frequency distributions.

To distinguish possible group differences in pre-service and in-service (for FY 1978 cohort only) characteristics, three additional

TABLE 3

Ratings

Traditional

Administrative and Clerical

CTA	Cryptologic Technician, Administrative
CTI	Cryptologic Technician, Interpretive
CTM	Cryptologic Technician, Maintenance
CTO	Cryptologic Technician, Communication
CTR	Cryptologic Technician, Collection
CTT	Cryptologic Technician, Technical
DK	Disbursing Clerk
DP	Data Processing Technician
IS	Intelligence Specialist
JO	Journalist
LN	Legalman
MS	Mess Management Specialist
NC	Navy Counselor
PC	Postal Clerk
PN	Personnelman
RM	Radioman
RP	Religious Program Specialist
SH	Ships Serviceman
SK	Storekeeper
YN	Yeoman
SN	Seaman[a]
SA	Apprentice[a]
SR	Recruit[a]

Medical and Dental

HM	Hospital Corpsman[b]
DT	Dental Technician[c]

Non-traditional

Aviation

AN	Airman
AA	Apprentice
AR	Recruit
ABE	Launch/Recovery Equipment Aviation Boatswain Mate
ABF	Fuels Aviation Boatswain Mate

[a]Note: since most of these women enter Traditional Ratings, they were included under the traditional category.

[b]Note: includes women designated as HN, HA, and HR.

[c]Note: includes women designated as DN, DA, and DR.

ABH	Aircraft Handling Boatswain Mate
AC	Air Traffic Controller
AD	Aviation Machinist's Mate
ADR	Aviation Machinist's Mate, Reciprocating Engines
AE	Aviation Electrician's Mate
AG	Aerographer's Mate
AK	Aviation Storekeeper
AME	Safety Equipment Structural Mechanic
AMH	Hydraulics Structural Mechanic
AMS	Structures Structural Mechanic
AO	Aviation Ordinanceman
AQ	Aviation Fire Control Technician
ASE	Electricial Aviation Support Equipment Technician
ASH	Hydraulics Support Equipment Technician
AT	Aviation Electronics Technician
AW	Aviation Anti-Submarine Warfare Operator
AX	Aviation Anti-Submarine Warfare Technician
AZ	Aviation Maintenance Administrationman
PH	Photographer's Mate
PR	Aircrew Survival Equipmentman
TD	Tradevman

Electronics and Precision Instruments

DS	Data Systems Technician
ET	Electronics Technician
IM	Instrumentman
OM	Opticalman

Engineering and Hull

BT	Boiler Technician
EM	Electrician's Mate
EN	Engineman
GS	Gas Turbine Systems Technician
GSE	Gas Turbine Systems Technician, Electrical
GSM	Gas Turbine Systems Technician, Mechanical
HT	Hull Maintenance Technician
IC	Interior Communications Specialist
ML	Molder
MM	Machinist's Mate
MR	Machinery Repairman
PM	Patternsmaker

Deck

BM	Boatswain Mate
EW	Electronic Warfare Technician
MA	Master-At-Arms
OS	Operations Specialist

OT	Ocean Systems Technician
QM	Quartermaster
SM	Signalman
ST	Sonar Technician
STG	Surface Sonar Technician
STS	Submarine Sonar Technician

Ordinance

FN	Fireman
FA	Apprentice
FR	Recruit
FT	Fire Control Technician
FTB	Ballistic Missile Fire Control Technician
FTG	Gun Fire Control Technician
FTM	Surface Missile Fire Control Technician
GMG	Gunner's Mate, Guns
GMM	Gunner's Mate, Missiles
GMT	Gunner's Mate, Technician
MN	Missileman
MT	Missile Technician
TM	Torpedoman's Mate

Construction

CN	Constructionman
CA	Apprentice
CR	Recruit
BU	Builder
CE	Construction Electrician
CM	Construction Mechanic
EA	Engineering Aid
EO	Engineering Operator
SW	Steelworker
UT	Utilityman

Miscellaneous

DM	Illustrator--Draftsman
LI	Lithographer
MU	Musician

groups of enlisted women were examined using stepwise regression from the Statistical Analysis System package. The groups included Navy enlisted women who were E-1's; enlisted women who were Seamen, Seaman Apprentices,

TABLE 4

Definitions of Traditional Variables

Variable and Categories	Definitions
Race	
Caucasian	
Black	
Other	Other minorities
Age	Age at time of enlistment or as of June 1981
17 Years	
18 Years	
19 Years	
20-22 Years	
23 Years and older	
Mental Group Category	
I	AFQT percentiles: 95-99[a]
II	67-94
III (upper)	38-66
III (lower)	19-37
IV	10-18
V	0-9
Years of Education	
HSG	High school diploma
GED	Equivalent high school degree
One or more College Years	
Primary Dependency Status	
Dependents	Spouse and/or children
No Dependents	

[a]For individuals with active duty service dates prior to October 1980, AFQT percentiles were renormed in the following manner: conversion from percentile to raw score was done using scales in effect prior to DOD renorming (before October 1980). Using the computed raw score, a new percentile was determined according to the new scales in effect after DOD renorming as ASVAB (after October 1980). Subsequent mental grouping by percentile is consistent with guidance from Mr. Kenneth Gay, originator of the Enlisted Survival Tracking File.

TABLE 5

Definitions of Non-traditional Variables

Variable and Categories	Definitions
A-School Attendance	
Attended A-School	
Currently Attends	
Slated to Attend	
Striker	Designated for a particular rating, not yet a petty officer
General Detail	Non-rated, non-designated E-1 through E-3
Sea-Shore Status	
Sea Duty	See Table 2
Shore Duty	
Traditional/Non-traditional Status	
Traditional Ratings	See Table 3
Non-traditional Ratings	

or Seaman Recruits; and the enlisted women who had entered the Navy in Fiscal Year 1978.

Moving now to Section III, results of analyses will be discussed and, hopefully, some insight concerning Navy enlisted females and emerging trends will begin to develop.

TABLE 6

Definitions of Other Variables

Variable and Categories	Definitions
Paygrade	
E-9	Paygrade at time of enlistment or as of June 1981
E-8	
E-7	
E-6	
E-5	
E-4	
E-3	
E-2	
E-1	
Term of Enlistment	
2 Year	Term of obligated service
3 Year	
4 Year	
5 Year	
6 Year	
Type of Acquisition	
Non-prior Service	Recruited immediately
Reenlisting USN	
Prior Navy Service	
Delayed Entry Program	Up to one year delay
USNR Enlistment	

III. FINDINGS

A detective in an old television series used to ask for "just the facts, ma'am." Facts alone cannot answer all of our questions about women in the Navy, but they are a good place to begin. Facts which describe what type of women are attracted to, and enlisted by, the Navy, and what type of women will be likely to attrite can better enable analysts to recommend and implement policy. Without such information, policy becomes arbitrary and successful gender integration within the Navy less likely.

The information presented in Section III is the result of analyses performed on two data sets: one is a Navy female recruit population and the other is a total Navy female enlisted population made up of enlisted women who were either currently on active duty (as of June 1981), or who had attrited sometime between third quarter FY 1977 and third quarter FY 1981 (see Table 7). The "Stay" and "Attrite" groups from the Total Population were subsequently separated and each divided into women at Sea versus Shore Commands and women in Traditional versus Non-traditional Ratings. Initial data included information on "traditional" variables such as Race, Age, Mental Group, Years of Education, and Dependency Status, while subsequent data analyses addressed less traditional variables such as Paygrade, Type or Term of Enlistment, Sea versus Shore, Traditional/Non-traditional Ratings, and A-School Status.

TABLE 7

Groups Analyzed in This Chapter

Group	Definitions
1. Female Recruits	1. Women enlisted in the Navy between March 1978 and June 1981. N = 32,225
2. Total Navy Female Enlisted Population	2. Women serving in the Navy on Active duty any time during period between fourth quarter FY 1977 and third quarter FY 1981. N = 43,179
A. Stays	A. Women listed as active duty as of June 1981. N = 33,322
B. Attrites	B. Women who attrited from the Navy any time between fourth quarter FY 1977 and third quarter FY 1981. N = 9,857

A. THE BEGINNING: A LOOK AT RECRUITS

Risking criticism for labeling any individual as "typical," the following pages describe characteristics common to a majority of Navy female recruits (see Tables 8, 9, and 10).

Using the entire Survival Tracking File (STF), 32,225 "first" records of all enlisted women with active duty service dates from March 1978 to June 1981 were selected to form a Navy female recruit population. Because initial formation of the STF involved copying all active duty enlisted records from the Enlisted Master Record to the STF, many "first" records were of individuals well into their Navy careers. It was felt that by March 1978, the STF had aged enough for reasonable certainty that first records were actually reflecting individuals newly enlisted into

TABLE 8

Characteristics of Female Navy Recruits by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class[b]
Race		
Caucasian	26,563	82.4
Black	4,662	14.5
Other	1,000	3.1
Total	32,225	100.0
Age (Missing Observations = 9)		
17 Years	24	0.1
18 Years	573	1.6
19 Years	3,658	11.3
20-22 Years	16,554	51.0
≥ 23 Years	11,407	36.0
Total	32,216	100.0
Mental Group Category (Missing Observations = 547)		
I	299	0.9
II	5,796	18.3
III (upper)	11,827	37.4
III (lower)	13,054	41.2
IV	702	2.2
V	--	0.0
Total	31,678	100.0
Years of Education (Missing Observations = 426)		
HSG	26,460	83.2
GED	3,748	11.8
≥ One Yr College	1,591	5.0
Total	31,799	100.0
Primary Dependency Status (Missing Observations = 26,748)		
Dependents	4,311	78.7
No Dependents	1,166	21.3
Total	5,477	100.0

[a]Women with active duty service dates from March 1978 to June 1981. (N = 32,225)

[b]Percentage of N represented by variable subgroup (e.g., Black; 4,662 ÷ 32,225 = 14.5%).

TABLE 9

Characteristics of Female Navy Recruits
by Non-traditional Variables

Subgroup	N	Distribution Within Variable Class
A-School Attendance (Missing Observations = 194)		
Attended A-School	671	2.1
Currently Attends	8,399	26.2
Slated to Attend	--	0.0
Striker	875	2.7
General Detail	22,086	69.0
Total	32,031	100.0
Sea/Shore Status (Missing Observations = 22)		
Sea Duty	85	0.3
Shore Duty	32,118	99.7
Total	32,203	100.0
Traditional/Non-traditional Rating Status[a]		
Traditional Ratings	26,229	81.4
Non-traditional Ratings	5,996	18.6
Total	32,225	100.0

[a]See Appendix G for Traditional/Non-traditional Ratings.

the Navy. Again, because of administrative time lags, an individual may not have a first record entered on the Survival Tracking File for as long as two months after enlisting; the shortest time for entry might be as early as one or two weeks after enlistment. Unfortunately, the STF provides no means for determining length of time between enlistment date and date of initial file entry. Consequently, the "recruit" population may contain some individuals who have completed the eight-week boot camp training for Navy enlisted women.

TABLE 10

Characteristics of Female Navy Recruits
by Paygrade, Term of Enlistment, and Type of Acquisition

Subgroup	N	Distribution Within Variable Class
Paygrade		
E-9	--	0.0
E-8	--	0.0
E-7	2	0.01
E-6	9	0.03
E-5	85	0.26
E-4	118	0.4
E-3	4,693	14.5
E-2	3,706	11.5
E-1	23,612	73.3
Total	32,225	100.0
Term of Enlistment		
2 Year	495	1.5
3 Year	97	0.3
4 Year	30,697	95.3
5 Year	82	0.3
6 Year	854	2.6
Total	32,225	100.0
Type of Acquisition (Missing Observations = 162)		
Non-prior Service	1,895	5.9
Reenlisting USN	56	0.2
Prior Naval Service	257	0.8
Delayed Entry Program	28,992	90.4
USNR Enlistment	868	2.7
Total	32,063	100.0

As has been observed by others [Ref. 1], the majority of women entering the Navy were Caucasian (82.4 percent) and between the ages of 20 and 22 (51 percent). In terms of the usual measurements of quality, 83.2 percent entered as High School Graduates, but surprisingly,

scored mostly in Mental Group III-upper and III-lower, 37.4 percent and 41.2 percent, respectively.

Dependency Status of Navy female recruits was difficult to evaluate because of the large number of missing values (26,748 out of 32,225). Of the 5,477 values available, 78.7 percent were listed as having primary dependents.

Not unexpected was the finding that the vast majority of female recruits were assigned to Shore Commands (99.7 percent). However, since length of service determination is not readily accessible on the STF, women still assigned to recruit training commands were not distinguished from those who had completed boot camp training. Those women at the recruit training commands may be a large percentage of those assigned to shore-based commands.

A large majority of Navy female recruits (81.4 percent) were established in ratings traditionally occupied by women. Again, this would include mainly clerical, administrative, or medical types of jobs. Contrary to previously quoted Recruiting Commandy policy [Ref. 8], the majority of female Navy recruits (69 percent) were in the General Detail population while only 26.2 percent were listed as currently attending A-School. It was expected that the distribution would be quite different with 70 percent attending, or slated to attend, A-School and 30 percent General Detail. Somewhat suspicious was the total absence of individuals in the "Slated To Attend" category. Since according to Recruiting Command policy, 70 percent of women enlisting in the Navy are either slated for, or immediately enrolled in A-School, it was felt that

possibly some miscoding or misinterpretation of status had taken place in the initial coding of these women on the Survival Tracking File.

By far the most common term of enlistment for Navy female recruits was that of four years (95.3 percent) with 90.4 percent enlisting via the Delayed Entry Program. Perhaps owing to special lateral entry programs, a few women were enlisted at the E-3 (14.5 percent), E-4 (0.4 percent), E-5 (0.26 percent), E-6 (0.03 percent), and E-7 (0.01 percent) paygrades, but the greatest number of women (73.3 percent) were enlisted at the E-1 level.

B. CHARACTERISTICS OF THE TOTAL NAVY ENLISTED FEMALE POPULATION

The next examination of data on the Survival Tracking File (STF) deals with the Total Navy Enlisted Female Population which is defined as women who were either on active duty or who had attrited from fourth quarter FY 1977 through third quarter FY 1981 (the time period presently contained on the STF). Last (current or exit) records of individuals were selected in order to obtain an accurate picture of certain characteristics of Navy enlisted women. This was in contrast to the first (entry) records that had been studied in the Enlisted Female Recruit Population. Most of the 32,225 recruits are also members of the Total Population. (Those women recruits with Terms of Enlistments of three years or less because of expiration of obligated service were deleted from the Total Population.) Tables 11 through 13 present frequencies for traditional, non-traditional, and other variables, respectively.

In describing the "typical" enlisted woman, the following paragraphs report the subgroup within each variable class having the greatest frequency (modal group). The percentage value in parentheses is computed

TABLE 11

Characteristics of Total Navy Female Enlisted Population by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class[b]
Race		
Caucasian	36,000	83.3
Black	5,984	13.9
Other	1,195	2.8
Total	43,179	100.0
Age (Missing Observations = 11)		
17 Years	24	0.1
18 Years	571	1.3
19 Years	3,583	8.3
20-22 Years	16,710	38.7
≥ 23 Years	22,280	51.6
Total	43,168	100.0
Mental Group Category (Missing Observations = 1,481)		
I	357	0.9
II	7,777	18.7
III (upper)	15,447	37.0
III (lower)	16,804	40.3
IV	1,298	3.1
V	15	0.0
Total	41,698	100.0
Years of Education (Missing Observations = 259)		
HSG	36,443	84.9
GED	4,357	10.2
≥ One Yr College	2,120	4.9
Total	42,920	100.0
Primary Dependency Status (Missing Observations = 18,810)		
Dependents	7,269	29.8
No Dependents	17,100	70.2
Total	24,369	100.0

[a]Women on active duty as of 30 June 1981 or who had attrited during period between 4th quarter FY 1977 and 3rd quarter FY 1981. (N = 43,179)

[b]Percentage of N represented by variable subgroup (e.g., Black; 5,984 ÷ 43,179 = 13.9%).

TABLE 12

Characteristics of Total Navy Female Enlisted Population by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class
A-School Attendance (Missing Observations = 5,735)		
Attended A-School	22,296	59.6
Currently Attends	2,430	6.5
Slated to Attend	42	0.1
Striker	2,516	6.7
General Detail	10,160	27.1
Total	37,444	100.0
Sea/Shore Status (Missing Observations = 9)		
Sea Duty	3,953	9.2
Shore Duty	39,217	90.8
Total	43,170	100.0
Traditional/Non-traditional Rating Status (Missing Observations = 547)		
Traditional Ratings	31,080	72.0
Non-traditional Ratings	12,099	28.0
Total	43,179	100.0

[a]N = 43,179.

by dividing that variable subgroup by the corresponding subgroup in the Total Population (less the number of missing observations for the variable). For example, as shown in Table 11 under the variable "Years of Education," the number of observations for the High School Graduate category is 36,443. Dividing that number by 42,920 (the Total Population less missing values), it was determined that High School Graduates represent 84.9 percent of the Total Population. In addition to the following

TABLE 13

Distribution of Total Navy Female Enlisted Population by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class
Paygrade		
E-9	3	0.1
E-8	28	0.5
E-7	208	0.1
E-6	1,774	4.1
E-5	6,372	14.8
E-4	8,763	20.3
E-3	12,617	29.2
E-2	6,484	15.0
E-1	6,930	16.0
Total	43,179	100.0
Term of Enlistment		
2 Year	1,004	2.3
3 Year	499	1.2
4 Year	38,808	89.9
5 Year	279	0.6
6 Year	2,589	6.0
Total	43,179	100.0
Type of Acquisition (Missing Observations = 1,157)		
Non-prior Service	3,400	8.1
Reenlisting USN	1,044	2.5
Prior Naval Service	674	1.6
Delayed Entry Program	35,387	84.2
USNR Enlistment	1,517	3.6
Total	42,022	100.0

[a]N = 43,179.

descriptions of modal groups, more complete distribution for each variable class may be found in the appropriate tables.

Data analysis of the Total Population indicated that the average Navy enlisted woman was a High School Graduate (84.9 percent), 23 years old or older (51.6 percent), had No Dependents (70.2 percent), and was Caucasian (83.3 percent). The woman most likely entered the Navy via the Delayed Entry Program (84.2 percent), for a 4 year Term of Enlistment (89.9%), and had been classified in Mental Group Category III-lower (40.3 percent). In addition, the woman had attended A-School (59.6 percent), was assigned to a Shore-Based Command (90.8 percent), and was an E-3 (29 percent) in a Traditional Rating (72 percent).

In comparing the average woman from the Total Population with the typical female Navy recruit as portrayed in Tables 8 through 10, much of the data from the two groups was, as expected, similar. Major differences in certain data elements were explained by the fact that in one group the woman was a recruit, i.e., young, junior in rank, and assigned to and/or receiving training at a shore-based command. One surprising fact was uncovered: the average female recruit was in a General Detail assignment (69 percent) and only 28.3 percent of the female recruit population had received A-School training. In contrast, Navy women from the Total Population showed a nearly exact reversal of those numbers: 59.6 percent had attended A-School, while only 27.1 percent were assigned to General Detail. The remaining members of each group (2.7 percent of the Total Population and 13.3 percent of the recruits) are either currently attending A-School, slated to attend A-School, or designated as Strikers. Also of interest was the fact that the female Recruit Population had a

greater chance of entering a Traditional Rating 81.4 percent) than did the average woman (72 percent) among the Total Navy Population of enlisted women.

C. THOSE WHO STAYED

Perhaps one of the most interesting areas of data analysis which was undertaken was that of women who were currently on active duty (as of June 1981). From the Total Population group ("Stays" plus "Attrites"), the most current, or last records were selected to form the group of "Stays," i.e., those Navy enlisted females who stayed to complete at least one term of obligated service. (Relevant data may be found in Tables 14, 15, and 16.) Out of a Total Population of 43,179 Navy enlisted women, 33,322 were on active duty as of June 1981. It is important to keep in mind that individuals on the file with active duty service dates coinciding with initiation of the STF have not yet completed four years of active duty. It was felt, however, that since the file is only one calendar quarter short of being four years old, individuals listed as being on active duty as of June 1981 had a high probability of completing obligated service. These women were, therefore, included in the "Stay" population.

The Navy enlisted women on active duty as of June 1981 were mostly Caucasian (81.9 percent), 23 years of age or older (42.6 percent), classified in Mental Group III (37.2 percent III-upper and 38.9 percent III-lower), and were High School Graduates (86.4 percent). Looking at Table 15, it can be seen that the majority (65.2 percent) had attended A-School and were assigned to Shore Duty (89.1 percent) in Traditional Ratings (71.2 percent) Primary Dependency Status codes indicated 67.7

TABLE 14

Characteristics of Active Duty Navy Enlisted Women by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	27,260	81.9	75.7
Black	5,067	15.2	84.7
Other	995	2.9	83.3
Total	33,322	100.0	77.2
Age (Missing Observations = 10)			
17 Years	24	0.1	100.0
18 Years	525	1.6	91.9
19 Years	3,141	11.3	87.7
20-22 Years	13,100	39.3	78.4
≥ 23 Years	16,522	49.6	74.2
Total	32,312	100.0	77.2
Mental Group Category (Missing Observations = 1,223)			
I	318	1.0	89.1
II	6,284	19.6	80.8
III (upper)	11,962	37.26	77.4
III (lower)	12,478	38.9	74.3
IV	1,042	3.2	80.3
V	15	0.04	100.0
Total	32,099	100.0	77.0
Years of Education (Missing Observations = 151)			
HSG	28,661	86.4	78.6
GED	2,877	8.7	66.0
≥ One Yr College	1,633	4.9	77.6
Total	33,171	100.0	77.2
Primary Dependency Status (Missing Observations = 15,481)			
Dependents			
No Dependents			
Total			

[a]Women on active duty as of 30 June, 1981 (N = 33,322).

[b]Variable subgroup ÷ corresponding subgroup in base population (e.g., Active Duty Caucasians ÷ Total Population Caucasians: 27,260 ÷ 36,000 = 75.7%).

TABLE 15

Characteristics of Active Duty Navy Enlisted Women by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 4,966)			
Attended A-School	18,483	65.2	82.9
Currently Attends	1,796	6.3	73.9
Slated to Attend	42	0.1	100.0
Striker	1,977	7.0	78.6
General Detail	6,058	21.4	54.6
Total	28,356	100.0	75.7
Sea/Shore Status (Missing Observations = 9)			
Sea Duty	3,628	10.9	91.8
Shore Duty	29,685	89.1	75.5
Total	33,313	100.0	77.2
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	23,735	71.2	76.4
Non-traditional Ratings	9,587	28.8	79.2
Total	33,322	100.0	77.2

[a]Women on active duty as of 30 June, 1981 (N = 33,322).

[b]See Appendix H for rating distribution of Active Duty Women.

percent of active duty Navy enlisted women claimed no Primary Dependents. Again, this is a variable with a significant number of missing values.

Over 50 percent of Navy enlisted females were in the E-1 to E-3 paygrades (30.8 percent E-3, 14.2 percent E-2, and 10.61 percent E-1). In 89 percent of the cases, Term of Enlistment was four years with Type

TABLE 16

Characteristics of Active Duty Navy Enlisted Women by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	3	0.01	100.0
E-8	28	0.08	100.0
E-7	200	0.6	96.2
E-6	1,717	5.2	96.8
E-5	5,674	17.0	89.0
E-4	7,170	21.5	81.8
E-3	10,251	30.8	81.2
E-2	4,744	14.2	73.2
E-1	3,535	10.61	51.0
Total	33,322	100.0	77.2
Term of Enlistment			
2 Year	824	2.5	82.1
3 Year	392	1.2	78.6
4 Year	29,643	89.0	76.4
5 Year	247	0.7	88.5
6 Year	2,216	6.6	85.6
Total	33,322	100.0	77.2
Type of Acquisition (Missing Observations = 999)			
Non-prior Service	2,375	7.3	69.9
Reenlisting USN	937	2.9	89.8
Prior Naval Ser.	535	1.7	79.4
Delayed Entry Prog.	27,217	84.2	76.9
USNR Enlistment	1,259	3.9	83.0
Total	32,323	100.0	76.9

[a]Women on active duty as of 30 June, 1981 (N = 33,322).

of Acquisition being largely through the Delayed Entry Program (84.2 percent).

The description thus far has been simply pointing out modal groups in each variable category. For more significant comparisons, another type of analysis, namely "Representativeness of Total Subgroup Population," was undertaken. Each subgroup (e.g., Caucasian, Black, Other) of a variable class (e.g., Race) was divided by the number of women in the corresponding subgroup of the base population. For example, of the 36,000 Caucasians in the Total Population, 27,260, or 75.7 percent (27,260 - 36,000) were on active duty as of June 1981. The 75.7 percent can then be compared with the percent of base (Total) population still on active duty. For example, if 77.2 percent of the original Total Population is still on active duty, one would expect about the same percentage of Blacks, Caucasians, 18-Year-Olds, High School Graduates, etc., to be represented in the current active duty Navy female enlisted population.

As of June 1981, 77.2 percent of the Total Navy female enlisted population was listed as being active duty. Of some note was the fact that Blacks and other minorities had more than the expected representation, 84.7 percent and 83.3 percent, respectively, remaining on active duty. Also of interest was the fact that younger women had higher than expected representation in the active duty group, 87.7 percent for 19-year-olds and 91.9 percent for 18-year-olds. Mental Group I had 89.1 percent (N = 318) still on active duty versus 77 percent for the Total Population. Women with GED's were greatly under-represented; instead of the expected 77.2 percent, only 66 percent remained on active duty.

Although a small portion of the enlisted female active duty population, women assigned to Sea Duty had outstanding representation in that 91.8 percent of their total population was found to be on active duty. As paygrade decreased, so did representativeness, with a low occuring at E-1 (only 51 percent of the Total Population of E-1's remaining) and highs at the E-5 to E-7 level (89 percent of E-5's, 96.8 percent of E-6's, and 96.2 percent of E-7's remaining on active duty).

The two and six year Terms of Enlistments had best representation, with 82.1 percent and 85.6 percent, respectively, of their total population still on active duty. Reenlisting USN females had much higher than average percentages remaining from their original population (89.8 percent).

Few role models seem to exist for career-minded Navy enlisted females. Only three E-9's and 28 E-8's were on active duty as of June 1981.

1. Sea and Shore

The "typical" Navy enlisted woman at a Shore Command (relevant data in Tables 17, 18, and 19) were Caucasian (81.6 percent), 23 years of age or older (49.7 percent), in Mental Group III (37.5 percent in III-upper and 38.2 percent in III-lower), and a High School Graduate (86.2 percent). Without Dependents (66.7 percent), she most likely had attended A-School (64.5 percent), and was established in a Traditional Rating (71.8 percent). Over 50 percent were either E-3 (30.9 percent) or E-4 (20.8 percent) with 11.6 percent E-1's and 13.9 percent E-2's. The most common Term of Enlistment was that of four years (88.7 percent) and, as expected, most had enlisted through the Delayed Entry Program 83.7 percent).

Few major differences were observed between enlisted women at Sea and those at Shore based commands. Navy enlisted women at Sea had

TABLE 17

Characteristics of Active Duty Navy Enlisted Women at Shore Commands by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	24,213	81.6	88.8
Black	4,594	15.5	90.7
Other	878	2.9	88.2
Total	29,685	100.0	89.1
Age (Missing Observations = 8)			
17 Years	24	0.1	100.0
18 Years	508	1.7	96.8
19 Years	2,829	9.5	90.1
20-22 Years	11,570	39.0	88.3
≥ 23 Years	14,746	49.7	89.2
Total	29,677	100.0	89.1
Mental Group Category (Missing Observations = 1,118)			
I	306	1.1	96.2
II	5,697	19.9	90.7
III (upper)	10,706	37.5	89.5
III (lower)	10,927	38.2	87.6
IV	917	3.2	88.0
V	14	0.1	93.3
Total	28,567	100.0	89.1
Years of Education (Missing Observations = 140)			
HSG	25,648	86.2	88.9
GED	2,578	8.7	89.6
≥ One Yr College	1,499	5.1	91.8
Total	29,545	100.0	89.1
Primary Dependency Status (Missing Observations = 13,983)			
Dependents	5,226	33.3	90.7
No Dependents	10,476	66.7	86.7
Total	15,702	100.0	88.0

[a]N = 29,685.

[b]Variable subgroup ÷ corresponding subgroup in base population (e.g., Active Duty Caucasians at Shore Commands ÷ Active Duty Caucasians: 24,213 ÷ 27,260 = 88.8%).

TABLE 18

Characteristics of Active Duty Navy Enlisted Women at Shore Commands by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 4,322)			
Attended A-School	16,308	64.5	88.2
Currently Attends	1,756	7.0	97.8
Slated to Attend	42	0.2	100.0
Striker	1,766	7.0	89.3
General Detail	5,236	21.3	89.0
Total	28,356	100.0	89.1
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	21,310	71.8	89.8
Non-traditional Ratings	8,375	28.2	87.4
Total	29.685	100.0	89.1

[a]N = 29,685.

[b]See Appendix I for rating distribution of Active Duty Women at Shore Commands.

43.9 percent of their group classified as Mental Group III-lower versus the 38.2 percent III-lower at Shore Commands. A-School graduates accounted for 70.4 percent of the women at Sea and only 64.5 percent of women at Shore activities. At Sea, 66.6 percent of enlisted women were in Traditional Ratings while, on Shore, Traditional Ratings had been assigned to 71.8 percent of active duty enlisted women.

Until now, the base population used to calculate representativeness has been the Total Population ("Stays" plus "Attrites"). To discuss representativeness of active duty Navy enlisted women at sea and shore

TABLE 19

Characteristics of Active Duty Navy Enlisted Women at Shore Commands by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	3	0.01	100.0
E-8	27	0.09	96.4
E-7	178	0.6	89.0
E-6	1,575	5.3	91.7
E-5	4,976	16.8	87.7
E-4	6,188	20.8	86.3
E-3	9,178	30.9	89.5
E-2	4,116	13.9	86.8
E-1	3,444	11.6	97.4
Total	29,685	100.0	89.1
Term of Enlistment			
2 Year	753	2.5	91.4
3 Year	354	1.2	90.3
4 Year	26,333	88.7	88.8
5 Year	220	0.8	89.1
6 Year	2,025	6.8	91.4
Total	29,685	100.0	89.1
Type of Acquisition (Missing Observations = 911)			
Non-prior Service	2,139	7.5	90.1
Reenlisting USN	846	2.9	90.3
Prior Naval Ser.	483	1.7	90.3
Delayed Entry Prog.	24,094	83.7	88.5
USNR Enlistment	1,212	4.2	96.3
Total	28,774	100.0	89.0

[a]N = 29,685.

commands, the base or reference population will be the entire population of women on active duty as of June 1981 (the 33,322 women counted in the "Stay" population). (See Tables 20 through 22.)

In terms of Navy enlisted women currently on active duty, 89.1 percent (29,685 ÷ 33,322) were at Shore based commands while 10.9 percent (3,628 ÷ 33,322) were assigned to Sea based commands. Eighteen-year-olds were somewhat over-represented on Shore with 96.8 percent of their active duty group at Shore Commands and only 3.2 percent at Sea. In terms of Paygrade, E-2's and E-4's were slightly over-represented at Sea, 13.2 percent and 13.7 percent, respectively, versus the expected 10.9 percent. Of all active duty E-1's, 97.4 percent (instead of the expected 89.1 percent) were at Shore Commands. Again, some of these individuals may still be assigned to recruit training commands.

2. Traditional and Non-traditional Ratings

In recent years, women, both in private and public sectors, have moved rapidly into occupations which before had been reserved for men. Expansion of women into these non-traditional areas is still relatively new to the Navy and, if not controversial, the subject is certainly an issue. For this reason, and to identify any possible differences between women in Traditional versus Non-traditional ratings, 33,322 active duty women were divided into those with Traditional Ratings and those with Non-traditional Ratings.

Navy enlisted females in Traditional Ratings numbered 23,735. They were largely Caucasian (79.6 percent), 23 years of age or older (48.6 percent), in Mental Group III-lower (41.7 percent), and High School Graduates (87.1 percent). Most had No Dependents (67 percent),

TABLE 20

Characteristics of Active Duty Navy Enlisted Women at Sea Commands by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	3,041	83.8	11.2
Black	471	13.0	9.3
Other	116	3.2	11.7
Total	3,628	100.0	10.9
Age (Missing Observations = 2)			
17 Years	0	0.0	0.0
18 Years	17	0.5	3.2
19 Years	312	8.6	9.9
20-22 Years	1,529	42.2	11.7
≥ 23 Years	1,768	48.7	10.7
Total	3,626	100.0	10.9
Mental Group Category (Missing Observations = 100)			
I	12	0.3	3.8
II	585	16.6	9.3
III (upper)	1,256	35.6	10.4
III (lower)	1.550	43.9	12.4
IV	124	3.5	11.9
V	1	0.1	10.9
Total	3,528	100.0	
Years of Education (Missing Observations = 8)			
HSG	3,189	88.1	11.1
GED	299	8.3	10.4
≥ One Yr College	132	3.6	8.2
Total	3,620	100.0	10.9
Primary Dependency Status (Missing Observations = 1,494)			
Dependents	532	24.9	9.2
No Dependents	1,602	75.1	13.3
Total	2,134	100.0	12.0

[a] N = 3,628.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Active Duty Caucasians at Sea Commands ÷ Active Duty Caucasians: 3,041 ÷ 27,260 = 11.2%).

TABLE 21

Characteristics of Active Duty Navy Enlisted Women at Sea Commands by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 539)			
Attended A-School	2,174	70.4	11.8
Currently Attends	40	1.3	2.2
Slated to Attend	--	0.0	0.0
Striker	211	6.8	10.7
General Detail	664	21.5	11.0
Total	3,089	100.0	10.9
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	2,417	66.6	10.2
Non-traditional Ratings	1,211	33.4	12.6
Total	3,628	100.0	10.9

[a]N = 3,628.

[b]See Appendix J for rating distribution of Navy enlisted women at Sea Commands.

had attended A-School (61.5 percent), and were assigned to a Shore Command (89.8 percent). Most Navy enlisted women in Traditional Ratings were either E-4's (20 percent) or E-3's (31 percent) who had incurred a four-year obligation (89.2 percent) and enlisted via the Delayed Entry Program (84.1 percent).

Navy enlisted women in Non-traditional Ratings accounted for 9,587 of the women on active duty as of June 1981. The percentage of Caucasians in Non-traditional Ratings (87.2 percent) was somewhat higher than that

TABLE 22

Characteristics of Active Duty Navy Enlisted Women at Sea Commands by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	0	0.0	0.0
E-8	1	0.02	3.6
E-7	22	0.6	0.1
E-6	142	3.9	8.3
E-5	696	19.2	12.3
E-4	979	27.0	13.7
E-3	1,070	29.5	10.4
E-2	628	17.3	13.2
E-1	90	2.48	2.5
Total	3,628	100.0	10.9
Term of Enlistment			
2 Year	67	1.9	8.1
3 Year	38	1.0	9.7
4 Year	3,308	91.2	11.2
5 Year	27	0.7	10.9
6 Year	188	5.2	8.6
Total	3,628	100.0	10.9
Type of Acquisition (Missing Observations = 87)			
Non-prior Service	236	6.7	9.9
Reenlisting USN	88	2.5	9.4
Prior Naval Ser.	51	1.4	9.5
Delayed Entry Prog.	3,122	88.2	11.5
USNR Enlistment	44	1.2	3.5
Total	3,541	100.0	11.0

[a]N = 3,628.

of the Traditional Ratings (79.6 percent). Most of the enlisted women in Non-traditional Ratings were 23 years or older (52 percent) and were in Mental Group III-upper (38.4 percent) or III-lower (31.8 percent). Mental Group II claimed 26.6 percent of the women in Non-traditional Ratings and only 16.7 percent of those in Traditional Ratings. The majority of enlisted women occupying Non-traditional Ratings were High School Graduates (84.6 percent), had attended A-School (74.4 percent versus 61.5 percent of those in Traditional Ratings), were assigned to Shore Duty (87.4 percent), and had No Dependents (69.4 percent). Non-traditional Ratings claimed two of the Navy's three female E-9's; the majority of enlisted women in Non-Traditional Ratings fell in the E-4 (25.4 percent) and E-3 (31 percent) Paygrades. Most enlisted women in Non-Traditional Ratings had enlisted with a four-year obligation (88.2 percent) via the Delayed Entry Program 84.4 percent. (See Tables 23 through 28.)

Of all Navy enlisted women on active duty as of June 1981, 71.1 percent were established in Traditional Ratings with the remaining 28.8 percent in Non-traditional Ratings. Blacks were over-represented in Traditional Ratings with 81.2 percent as opposed to the overall 71.2 percent of active duty women in traditional fields. The younger age groups also occurred more than expected: 79.2 percent of the 17-year-olds and 83.2 percent of the 19-year-olds in Traditional Ratings. Women assigned to Sea Duty were under-represented in Traditional Ratings with 66.6 percent instead of the 71.2 percent expected to be in traditional jobs. E-3's and Mental Group II were under-represented in Traditional Ratings with 66.1 percent and 60.9 percent, respectively.

TABLE 23

Characteristics of Active Duty Navy Enlisted Women in Traditional Ratings by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	18,896	79.6	69.3
Black	4,116	17.3	81.2
Other	723	3.1	72.7
Total	23,735	100.0	71.2
Age (Missing Observations = 8)			
17 Years	19	0.1	79.2
18 Years	437	1.8	83.2
19 Years	2,421	10.2	77.1
20-22 Years	9,313	39.3	71.1
≥ 23 Years	11,537	48.6	69.8
Total	23,727	100.0	71.2
Mental Group Category (Missing Observations = 897)			
I	203	0.9	63.8
II	3,825	16.7	60.9
III (upper)	8,403	36.8	70.2
III (lower)	9,529	41.7	76.3
IV	866	3.8	83.1
V	12	0.1	80.0
Total	22,832	100.0	71.2
Years of Education (Missing Observations = 106)			
HSG	20,586	87.1	71.8
GED	1,874	7.9	65.1
≥ One Yr College	1,169	5.0	71.6
Total	23,629	100.0	71.2
Primary Dependency Status (Missing Observations = 11,319)			
Dependents	4,102	33.0	71.2
No Dependents	8,314	67.0	68.8
Total	12,416	100.0	69.6

[a] N = 23,735.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Active Duty Caucasians in Traditional Ratings ÷ Active Duty Caucasians: 18,896 ÷ 27,260 = 69.3%).

TABLE 24

Characteristics of Active Duty Navy Enlisted Women in Traditional Ratings by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 3,473)			
Attended A-School	12,465	61.5	67.4
Currently Attends	1,441	7.1	80.2
Slated to Attend	41	0.2	97.6
Striker	1,528	7.6	77.3
General Detail	4,787	23.6	79.0
Total	20,262	100.0	71.4
Sea/Shore Status (Missing Observations = 8)			
Sea Duty	2,417	10.2	66.6
Shore Duty	21,310	89,8	71,8
Total	23,727	100.0	71.2

[a]N = 23,735. (See Appendix K for rating distribution of Active Duty Women in Traditional Ratings.)

Needless to say, many of the comments concerning representativeness within Traditional Ratings appeared in the converse in the case of Non-traditional Ratings. Blacks were under-represented with 18.8 percent instead of the expected overall 28.8 percent in Non-traditional Ratings. Mental Group II was over-represented (39.1 percent) as were GED's (34.9 percent) and women assigned to Sea Duty (33.4 percent). E-4's were over-represented at 33.9 percent.

D. CHARACTERISTICS OF NAVY ENLISTED WOMEN WHO HAVE ATTRITED

This section is concerned with the other subgroup of the Total Population--those 9,857 Navy Enlisted women who were considered Attrites.

TABLE 25

Characteristics of Active Duty Navy Enlisted Women in Traditional Ratings by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	1	0.0	33.3
E-8	18	0.1	64.3
E-7	164	0.7	82.0
E-6	1,271	5.4	74.0
E-5	3,947	16.6	69.6
E-4	4,737	20.0	66.1
E-3	7,349	31.0	71.7
E-2	3,484	14.6	73.4
E-1	2,764	11.6	78.2
Total	23,735	100.0	71.2
Term of Enlistment			
2 Year	643	2.7	78.0
3 Year	258	1.1	65.8
4 Year	21,183	89.2	71.5
5 Year	137	0.6	55.5
6 Year	1,514	6.4	68.3
Total	23,735	100.0	71.2
Type of Acquisition (Missing Observations = 737)			
Non-prior Service	1,652	7.2	69.6
Reenlisting USN	691	3.0	73.7
Prior Naval Ser.	403	1.8	75.3
Delayed Entry Prog.	19,346	84.1	71.1
USNR Enlistment	906	3.9	72.0
Total	22,998	100.0	71.2

[a]N = 23,735.

TABLE 26

Characteristics of Active Duty Navy Enlisted Women in Non-traditional Ratings by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	8,364	87.2	30.7
Black	951	9.9	18.8
Other	272	2.9	27.3
Total	9,587	100.0	28.8
Age (Missing Observations = 2)			
17 Years	5	0.0	20.8
18 Years	88	0.9	16.8
19 Years	720	7.6	22.9
20-22 Years	3,787	39.5	28.9
≥ 23 Years	4,985	52.0	30.2
Total	9,582	100.0	28.8
Mental Group Category (Missing Observations = 326)			
I	115	1.3	36.2
II	2,459	26.6	39.1
III (upper)	3,559	38.4	29.8
III (lower)	2,949	31.8	23.6
IV	176	1.9	16.9
V	3	0.0	20.0
Total	9,261	100.0	28.8
Years of Education (Missing Observations = 45)			
HSG	8,075	84.6	28.2
GED	1,003	10.5	34.9
≥ One Yr College	464	4.9	28.4
Total	9,542	100.0	28.8
Primary Dependency Status (Missing Observations = 4,162)			
Dependents	1,658	30.6	28.8
No Dependents	3,767	69.4	31.2
Total	5,425	100.0	30.4

[a] N = 9,587.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Active Duty Caucasians in Non-traditional Ratings ÷ Active Duty Caucasians: 8,364 ÷ 27,260 = 30.7%).

TABLE 27

Characteristics of Active Duty Navy Enlisted Women in Non-traditional Ratings by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 1,493)			
Attended A-School	6,018	74.4	32.6
Currently Attends	355	4.4	19.8
Slated to Attend	1	0.0	2.4
Striker	449	5.5	22.7
General Detail	1,271	15.7	21.0
Total	8,094	100.0	28.5
Sea/Shore Status (Missing Observations = 1)			
Sea Duty	1,211	12.6	33.4
Shore Duty	8,375	87.4	28.2
Total	9,586	100.0	28.8

[a]N = 9,587. (See Appendix L for rating distribution of Active Duty Women in Non-traditional Ratings.)

This subgroup included all women in all terms of enlistment who have attrited starting with fourth quarter FY 1977 through third quarter FY 1981. The frequencies for the overall distribution of female Attrites are presented in Tables 29 through 31 by traditional and non-traditional variables as well as Paygrade, Term of Enlistment, and Type af Acquisition. The data suggest that, as expected, the subgroup frequencies among the women Attrite Group (N = 9,857) is very similar to the subgroup frequencies determined for the Total Population (N = 43, 179) as shown in Tables 11 through 13.

TABLE 28

Characteristics of Active Duty Navy Enlisted Women in Non-traditional Ratings by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	2	0.02	66.6
E-8	10	0.1	35.7
E-7	136	0.37	18.0
E-6	446	4.7	26.0
E-5	1,727	18.01	30.4
E-4	2,433	25.4	33.9
E-3	2,902	30.3	28.3
E-2	1,260	13.1	26.6
E-1	771	8.0	21.8
Total	9,587	100.0	28.8
Term of Enlistment			
2 Year	181	1.9	22.0
3 Year	134	1.4	34.2
4 Year	8,460	88.2	28.5
5 Year	110	1.2	44.5
6 Year	702	7.3	31.7
Total	9,587	100.0	28.8
Type of Acquisition (Missing Observations = 262)			
Non-prior Service	723	7.8	30.4
Reenlisting USN	246	2.6	26.3
Prior Naval Ser.	132	1.4	24.7
Delayed Entry Prog.	7,871	84.4	28.9
USNR Enlistment	353	3.8	28.0
Total	9,325	100.0	28.8

[a]N = 9,587.

The discussion of data contained in each table will be formatted as follows: the initial discussion of each table will identify the characteristics for the typical enlisted woman who had attrited drawing comparisons between the Attrites and women from the Total Population. A variable subgroup followed by a percentage value enclosed in parantheses represents the category having the greatest frequency within each variable (modal group). Given the similarity of the Attrite Group and the Total Population, one might expect each group to show a similar frequency distribution of categories within each variable. Following the description of the modal group of each table, the second paragraph will be a discussion of the representativeness of the same group. Attrite subgroups within each variable were taken as a percent of the corresponding subgroup in the Total (or base) Population (e.g., Caucasian Attrites ÷ Total Population of Caucasians). If that ratio differs from the overall percentage of Attrites (i.e., number of Attrites ÷Total Population) by greater than five percent, then that subgroup was considered over- or under-represented in the Attrite Population. (Variable subgroup with less than 300 observations are not included in the discussion.) For example, in Table 29, examination of the Race variable shows that while the percentage of Caucasians at 24.3 percent is fairly representative considering the Attrite/Total Population ratio of 22.8 percent, both Blacks and Others at 15.3 and 16.7 percent, respectively, are outside the five percent criterion and can be considered as under-represented in the Attrite Population.

Table 29 outlines the distribution of enlisted female Attrites by traditional variables. In most areas, observed frequencies associated

TABLE 29

Characteristics of Navy Enlisted Females Who Have Attrited by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	8,740	88.7	24.3
Black	917	9.3	15.3
Other	200	2.0	16.7
Total	9,857	100.0	22.8
Age (Missing Observations = 1)			
17 Years	--	0.0	0.0
18 Years	46	0.5	8.1
19 Years	442	4.5	12.3
20-22 Years	3,610	36.6	21.6
≥ 23 Years	5,758	58.4	25.8
Total	9,856	100.0	22.8
Mental Group Category (Missing Observations = 258)			
I	39	0.3	10.9
II	1,493	15.6	19.2
III (upper)	3,485	36.3	22.6
III (lower)	4,326	45.1	25.7
IV	255	2.7	19.6
V	1	0.0	0.0
Total	9,599	100.0	23.0
Years of Education (Missing Observations = 108)			
HSG	7,782	79.8	21.4
GED	1,480	15.2	34.0
≥ One Yr College	487	5.0	23.0
Total	9,749	100.0	22.8
Primary Dependency Status (Missing Observations = 3,329)			
Dependents	1,509	23.1	20.8
No Dependents	5,019	76.9	29.4
Total	6,528	100.0	26.8

[a] N = 9,857.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Attrite Caucasians ÷ Total Population Caucasians: 8,740 ÷ 36,000 = 324.3).

with traditional variables reflected a woman with characteristics similar to the typical woman depicted in Table 11, which shows the distribution of the Total Population. The woman who attrited was more likely to be Caucasian (88.7 percent for women Attrites and 83.3 percent for the Total Population), was slightly older (for age 23 or older - 58.4 percent for women Attrites and 51.6 percent for the Total Population), most often classified in Mental Group Category III-lower (45.1 percent for women Attrites and 40.3 percent for the Total Population), was less likely to be a High School Graduate[4] (79.8 percent for women Attrities and 84.9 percent fot the Total Population), and had No Dependents (76.4 percent for women Attrites and 70.2 percent for the Total Population), than the woman who did not attrite.

As a group, Navy enlisted women who attrited represented approximately 22.8 percent of the Total Population. An analysis of the representativeness of category frequencies in traditional variables indicated that Blacks, the "Other" Race category, and 19-year-old women were underrepresented among Attrites with 15.3, 16.7, and 12.3 percent, respectively. In Years of Education, female Attrite GED recipients were over-represented at 34.5 percent.

Data concerning Navy enlisted female Attrite values in terms of non-traditional variables are shown in Table 30. Of the 9,857 women Attrites examined in this section, the typical Attrite was either a General Detail (45.1 percent) or an A-School Graduate (42 percent) with

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[4]The large number of High School Graduates in the Attrite Group is not unusual when one considers that over 84 percent of the total number of women analyzed in this study (N = 43,179) also have a high school degree.

TABLE 30

Characteristics of Navy Enlisted Females Who Have Attrited by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 769)			
Attended A-School	3,813	42.0	17.1
Currently Attends	634	7.0	26.1
Slated to Attend	--	0.0	0.0
Striker	539	5.9	21.4
General Detail	4,102	45.1	40.4
Total	9,088	100.0	24.3
Sea/Shore Status (Missing Observations = 9)			
Sea Duty	325	3.3	8.2
Shore Duty	9,532	96.7	24.3
Total	9,857	100.0	22.8
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	7,345	74.5	23.6
Non-traditional Ratings	2,512	25.5	20.8
Total	9,857	100.0	22.8

[a] N = 9,857.

[b] See Appendix M for rating distribution of enlisted women who have attrited.

the two categories of currently attending A-School or designated Striker accounting for the remaining 12.9 percent. Moreover, the enlisted woman most likely to attrite was from a Shore Command 96.7 percent for female Attrites and 90.8 percent for the Total Population), and slightly more

often assigned to Traditional Ratings (74.7 percent for female Attrites and 72 percent for the Total Population).

With women who had attrited representing approximately 22.8 percent of the Total Population, further analysis of the non-traditional variables uncovered two additional facts. First, A-School graudates at 17.1 percent were not as well represented among the Attrite Population, while the General Detail (40.4 percent) was over-represented. Second, women who had attrited from Sea Duty (8.2 percent) were under-represented among female Attrites.

Table 31 concerns other variables that might be related to attrition. The paygrade of the typical woman Attrite was an E-1 (34.4 percent), in comparison to E-3 for the average Navy enlisted woman. Most of the attriting women (84.2 percent) entered the Navy via the Delayed Entry Program under a four-year service obligation.

Given that enlisted women who attrited were approximately 22.8 percent of the Total Population, Nonprior Service women at 30.1 percent and E-1's at 49 percent were over-represented among Attrites, and women who had Reenlisted, had a six-year Term of Enlistment, and who were E-5's, were under-represented at 10.2, 14.4, and 11 percent, respectively.

1. Characteristics of Navy Enlisted Women Who Attrited from Shore Commands and Sea Duty

Of interest was the relationship of either Shore or Sea Duty with characteristics of Navy enlisted women. Those stationed at Shore Commands (N = 9,532) and those at Sea Commands (N = 325) were studied separately and then compared. Tables 32 through 34 show the frequency distribution for traditional, non-traditional, and other variables for

TABLE 31

Characteristics of Navy Enlisted Females Who Have Attrited by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	--	0.0	0.0
E-8	--	0.0	0.0
E-7	8	0.1	3.8
E-6	57	0.6	3.2
E-5	698	7.1	11.0
E-4	1,593	16.2	18.2
E-3	2,366	24.0	18.8
E-2	1,740	17.6	26.8
E-1	3,395	34.4	49.0
Total	9,857	100.0	22.8
Term of Enlistment			
2 Year	180	1.8	17.9
3 Year	107	1.1	21.4
4 Year	9,165	93.0	23.6
5 Year	32	0.3	11.5
6 Year	373	3.8	14.4
Total	9,857	100.0	22.8
Type of Acquisition (Missing Observations = 158)			
Non-prior Service	1,025	10.6	30.1
Reenlisting USN	107	1.1	10.2
Prior Naval Ser.	139	1.4	20.6
Delayed Entry Prog.	8,170	84.2	23.1
USNR Enlistment	258	2.7	17.0
Total	9,699	100.0	23.1

[a]N = 9,857.

TABLE 32

Characteristics of Navy Enlisted Females Who Have Attrited from Shore Commands by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	8,441	88.5	96.6
Black	900	9.4	98.1
Other	191	2.1	95.5
Total	9,532	100.0	96.7
Age (Missing Observations = 1)			
17 Years	--	0.0	0.0
18 Years	45	0.1	97.8
19 Years	434	4.5	98.2
20-22 Years	3,534	37.1	97.9
≥ 23 Years	5,518	58.3	95.8
Total	9,531	100.0	96.7
Mental Group Category (Missing Observations = 255)			
I	39	0.4	100.0
II	1,437	15.5	96.2
III (upper)	3,356	36.2	96.3
III (lower)	4,196	45.2	97.0
IV	248	2.7	96.9
V	1	--	--
Total	9,277	100.0	96.7
Years of Education (Missing Observations = 106)			
HSG	7,503	79.6	96.4
GED	1,453	14.9	98.1
≥ One Yr College	470	5.5	96.5
Total	9,426	100.0	96.7
Primary Dependency Status (Missing Observations = 3,286)			
Dependents	1,474	23.6	97.6
No Dependents	4,772	76.4	95.1
Total	6,246	100.0	95.6

[a] N = 9,532.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Attrite Caucasians at Shore Commands ÷ Attrite Caucasians: 8,441 ÷ 8,740 = 96.6%).

TABLE 33

Characteristics of Navy Enlisted Females Who Have Attrited from Shore Commands by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 717)			
Attended A-School	3,626	41.1	95.1
Currently Attends	634	7.2	100.0
Slated to Attend	--	0.0	0.0
Striker	523	5.9	97.0
General Detail	4,032	45.8	98.3
Total	8,815	100.0	96.9
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	7,117	74.6	96.9
Non-traditional Ratings	2,415	25.4	96.1
Total	9,532	100.0	96.7

[a]N = 9,532.

[b]See Appendix N for rating distribution of women who have attrited from shore.

Shore Commands, while Tables 35 through 37 portray the frequency distributions associated with Sea Commands.

The discussion of the findings in Tables 32 and 35 shows the similarities and differences in traditional variables between women who had attrited from Shore Commands and those who had attrited from Sea Duty. Because the number of women attriting from Sea Duty was so small (N = 325), the significance of the frequency data in Tables 35 through 37 are questionable. However, when applicable, some of the

TABLE 34

Characteristics of Navy Enlisted Females Who Have Attrited from Shore Commands by Paygrade, Term of Enlistment, and Type of Acquisition[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	--	0.0	0.0
E-8	--	0.0	0.0
E-7	6	0.1	75.0
E-6	54	0.6	94.7
E-5	633	6.6	90.7
E-4	1,493	15.7	93.7
E-3	2,286	24.0	96.6
E-2	1,689	17.7	97.1
E-1	3,371	35.3	99.2
Total	9,532	100.0	96.7
Term of Enlistment			
2 Year	177	1.8	98.3
3 Year	97	1.0	90.7
4 Year	8,863	93.0	96.7
5 Year	30	0.3	93.6
6 Year	365	3.9	97.9
Total	9,532	100.0	96.7
Type of Acquisition (Missing Observations = 149)			
Non-prior Service	987	10.5	96.3
Reenlisting USN	101	1.1	94.4
Prior Naval Ser.	136	1.4	97.8
Delayed Entry Prog.	7,906	84.3	96.8
USNR Enlistment	253	2.7	98.1
Total	9,383	100.0	96.7

[a]N = 9,532.

TABLE 35

Characteristics of Navy Enlisted Females Who Have Attrited from Sea Commands by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	299	92.0	3.4
Black	17	5.2	1.9
Other	9	2.8	4.5
Total	325	100.0	3.2
Age			
17 Years	--	0.0	0.0
18 Years	1	0.3	2.2
19 Years	8	2.5	1.8
20-22 Years	76	23.4	2.1
≥ 23 Years	240	73.8	4.2
Total	325	100.0	3.2
Mental Group Category (Missing Observations = 4)			
I	--	0.0	0.0
II	56	17.4	3.7
III (upper)	129	40.2	3.7
III (lower)	130	40.5	3.0
IV	6	1.9	2.3
V	--	0.0	0.0
Total	321	100.0	3.3
Years of Education (Missing Observations = 2)			
HSG	279	86.4	3.6
GED	27	8.4	1.8
≥ One Yr College	17	5.2	3.5
Total	323	100.0	3.3
Primary Dependency Status (Missing Observations = 43)			
Dependents	35	12.4	2.3
No Dependents	247	87.6	4.9
Total	282	100.0	4.3

[a] N = 325.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Attrite Caucasians at Sea Commands ÷ Attrite Caucasians: 299 ÷ 8,740 = 3.4%).

TABLE 36

Characteristics of Navy Enlisted Females Who Have Attrited from Sea Commands by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 52)			
Attended A-School	187	68.5	4.9
Currently Attends	--	0.0	0.0
Slated to Attend	--	0.0	0.0
Striker	16	5.9	3.0
General Detail	70	25.6	1.7
Total	273	100.0	3.0
Traditional/Non-traditional Rating Status[b]			
Traditional Ratings	228	70.2	3.1
Non-traditional Ratings	97	29.8	3.9
Total	325	100.0	3.3

[a] N = 325.

[b] See Appendix O for rating distribution of Attrites from sea.

sea attrite data is referenced. The discussion of Tables 33 and 36 is concerned with non-traditional variables of women who had attrited from Sea and Shore, and their similarities with the Total Attrite Group discussed in Table 30. The remaining variables are shown in Tables 34 and 37, and comparisons are made to the Total Attrite Group variables described in Table 31. Consistent with earlier discussions, the percentages adjacent to variables categories represents the largest frequency percentage of the subgroup among all subgroups for that specific variable.

TABLE 37

Characteristics of Navy Enlisted Females Who Have Attrited from Sea Commands by Paygrade, Term of Enlistment, and Type of Acquisition

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	--	0.0	0.0
E-8	--	0.0	0.0
E-7	2	0.6	25.0
E-6	3	0.9	5.2
E-5	65	20.0	9.3
E-4	100	30.8	6.3
E-3	80	24.6	3.4
E-2	51	15.7	2.9
E-1	24	7.4	0.7
Total	325	100.0	3.3
Term of Enlistment			
2 Year	3	0.9	1.7
3 Year	10	3.1	9.3
4 Year	302	92.9	3.3
5 Year	2	0.6	6.3
6 Year	8	2.5	2.1
Total	325	100.0	3.3
Type of Acquisition (Missing Observations = 9)			
Non-prior Service	38	12.1	3.7
Reenlisting USN	6	1.9	5.6
Prior Naval Ser.	3	0.9	2.1
Delayed Entry Prog.	264	83.5	3.2
USNR Enlistment	5	1.6	1.9
Total	316	100.0	3.3

Tables 32 and 35 report the distribution of enlisted women who attrited from Shore Duty and Sea Duty by traditional variables. The profile was similar to the typical women depicted in Table 11, which outlined the Total Population. The average woman who attrited was

White (92 percent from Sea Duty and 88.5 percent from Shore Duty), at least 23 years old (73.8 percent from Sea Duty and 88.5 percent from Shore Duty), in Mental Group Category III-lower (40.5 percent from Sea Duty and 45.2 percent from Shore Duty), a High School Graduate[5] (86.4 percent from Sea Duty and 79.6 percent from Shore Duty), and had No Dependents (87.6 percent from Sea Duty and 76.4 percent from Shore Duty).

Non-traditional variables are outlined in Table 33, Shore Commands, and Table 36, Sea Commands. The characteristics of women who had attrited from Shore Commands were very similar to the characteristics of all Attrites, as listed in Table 30: A-School Attendance (41.4 percent from Shore Duty and 42 percent for all Attrites), General Detail (45.8 percent from Shore Duty and 45.1 percent for all Attrites), and Traditional Ratings (74.6 percent from Shore Duty and 74.5 percent for all female Attrites). Of the women who had attrited from Sea Duty Commands, however, 68.5 percent had attended A-School and 25.6 percent were General Detail.

Tables 34 and 37 display characteristics of Navy enlisted women who had attrited from Shore Duty and Sea Duty by other variables that might be related to attrition. Again, women Attrites form Shore Commands were similar to all women who had attrited, as depicted in Table 31. The women most likely to attrite was an E-1 (35.3 percent from Shore Duty and 34.4 percent for all women Attrites), who entered through the Delayed

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[5]The large number of High School Graduates in the Attrite Group is not unusual when one considers that over 84 percent of the total number of women analyzed in this study (N = 43,179) also have a high school degree.

Entry Program (84.3 Percent from Shore Duty and 84.2 percent for all women Attrites) for a four-year enlistment (93 percent from Shore Duty and 93 percent for all women Attrites). The woman who had attrited from Sea Duty was similar in all respects except Paygrade, with E-4 being the most typical frequency (30.8 percent).

2. Characteristics of Navy Enlisted Women Who Have Attrited From Traditional and Non-Traditional Ratings

The assignment of women to Traditional and Non-traditional Ratings, and the relationship with attrition is addressed in the following paragraphs. Of the 9,857 women who attrited, 7,345 enlisted women had attrited from Traditinal Ratings and 2,512 had attrited from Non-traditional Ratings. Frequencies for traditional, non-traditional, and Paygrade, Term of Enlistment, and Type of Acquisition variables for Traditional and Non-traditional Ratings are shown in Tables 38 through 43.

The first paragraph discussing the tables describes the similarities and differences between women who had attrited from Traditional and Non-traditional Ratings. The percentage enclosed in parentheses is the subgroup having the greatest frequency within each variable class (modal group). Description of modal groups will be followed by a discussion of Attrite subgroups and their representativeness using all Attrites (Tables 29 through 31) as the base population for comparison.

Tables 38 and 41 are concerned with the characteristics of women in Traditional Ratings by Race, Age, Mental Group Category, Education, and Dependency variables. As had been noted before, the women most likely to attrite was Caucasian (87.6 percent of the Attrites from

TABLE 38

Characteristics of Navy Enlisted Females Who Have Attrited from Traditional Ratings by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	6,436	87.6	73.6
Black	763	10.4	83.2
Other	146	2.0	73.0
Total	7,345	100.0	74.5
Age			
17 Years	--	0.0	0.0
18 Years	41	0.6	89.1
19 Years	372	5.1	84.2
20-22 Years	2,720	37.0	75.3
≥ 23 Years	4,212	57.3	73.2
Total	7,345	100.0	74.5
Mental Group Category (Missing Observations = 203)			
I	24	0.3	61.5
II	957	13.4	64.1
III (upper)	2,564	35.9	73.6
III (lower)	3,375	47.3	78.0
IV	221	3.1	86.7
V	1	0.0	100.0
Total	7,142	100.0	74.4
Years of Education (Missing Observations = 86)			
HSG	5,845	80.5	75.1
GED	1,072	14.8	72.4
≥ One Yr College	342	4.7	70.2
Total	7,259	100.0	74.5
Primary Dependency Status (Missing Observations = 2,661)			
Dependents	1,063	22.7	70.4
No Dependents	3,621	77.3	72.1
Total	4,684	100.0	71.8

[a] N = 7,345.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Attrite Caucasians from Traditional Ratings ÷ Attrite Caucasians: 6,436 ÷ 8,740 = 73.6%).

TABLE 39

Characteristics of Navy Enlisted Females Who Have Attrited from Traditional Ratings by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 508)			
Attended A-School	2,618	38.3	68.7
Currently Attends	506	7.4	79.8
Slated to Attend	--	0.0	0.0
Striker	401	5.9	74.4
General Detail	3,312	48.4	80.7
Total	6,837	100.0	75.2
Sea/Shore Status (Missing Observations = 9)			
Sea Duty	228	3.1	70.2
Shore Duty	7,117	96.9	74.7
Total	7,345	100.0	74.5

[a]See Appendix P for rating distribution of women who have attrited from Traditional Ratings.

Traditional Ratings and 91.7 percent from Non-traditional Ratings were Caucasian), at least 23 years of age or older (57.3 percent from Traditional Ratings and 61.6 percent from Non-traditional Ratings), a High School Graduate[6] (80.5 percent from Traditional Ratings and 77.8 percent from Non-traditional Ratings), and had No Dependents (77.3 percent from Traditional Ratings and 75.8 percent from Non-traditional Ratings). While women who had attrited from Traditional Ratings were

[6]The large number of High School Graduates in the Attrite Group is not unusual when one considers that over 84 percent of the total number of women analyzed in this study (N = 43,179) also have a high school degree.

TABLE 40

Characteristics of Navy Enlisted Females Who Have Attrited from Traditional Ratings by Paygrade, Term of Enlistment, and Type of Acquisition

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	--	0.0	0.0
E-8	--	0.0	0.0
E-7	5	0.1	62.5
E-6	41	0.6	71.9
E-5	496	6.8	71.1
E-4	1,071	14.6	67.2
E-3	1,752	23.9	74.0
E-2	1,259	17.0	72.4
E-1	2,721	37.0	80.1
Total	7,345	100.0	74.5
Term of Enlistment			
2 Year	129	1.7	71.7
3 Year	78	1.1	72.9
4 Year	6,865	93.5	74.9
5 Year	25	0.3	78.0
6 Year	248	3.4	66.5
Total	7,345	100.0	74.5
Type of Acquisition (Missing Observations = 117)			
Non-prior Service	719	9.9	70.1
Reenlisting USN	76	1.1	71.0
Prior Naval Ser.	99	1.4	71.2
Delayed Entry Prog.	6,156	85.2	75.3
USNR Enlistment	178	2.4	69.0
Total	7,228	100.0	74.5

more often in Mental Group Category III-lower (47.3 percent), women who had attrited from Non-traditional Ratings were evenly distributed in both upper and lower categories of Mental Group Category III.

TABLE 41

Characteristics of Navy Enlisted Females Who Have Attrited from Non-traditional Ratings by Traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population[b]
Race			
Caucasian	2,304	91.7	26.4
Black	154	6.1	16.8
Other	54	2.2	27.0
Total	2,512	100.0	25.5
Age (Missing Observations = 1)			
17 Years	--	0.0	0.0
18 Years	5	0.2	10.9
19 Years	70	2.8	15.8
20-22 Years	890	35.4	24.7
≥ 23 Years	1,546	61.6	26.8
Total	2,512	100.0	25.5
Mental Group Category (Missing Observations = 56)			
I	15	0.6	38.5
II	536	21.8	35.9
III (upper)	921	37.5	26.4
III (lower)	951	38.7	22.0
IV	33	1.4	12.9
V	--	0.0	0.0
Total	2,456	100.0	25.6
Years of Education (Missing Observations = 22)			
HSG	1,937	77.8	24.9
GED	408	16.4	27.6
≥ One Yr College	145	5.8	29.8
Total	2,490	100.0	25.5
Primary Dependency Status (Missing Observations = 668)			
Dependents	446	24.2	29.6
No Dependents	1,398	75.8	27.9
Total	1,844	100.0	28.2

[a] N = 2,512.

[b] Variable subgroup ÷ corresponding subgroup in base population (e.g., Attrite Caucasians from Non-traditional Ratings ÷ Attrite Caucasians: 2,304 ÷ 8,740 = 26.4%).

TABLE 42

Characteristics of Navy Enlisted Females Who Have Attrited from Non-traditional Ratings by Non-traditional Variables[a]

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
A-School Attendance (Missing Observations = 261)			
Attended A-School	1,195	53.1	31.3
Currently Attends	128	5.7	20.2
Slated to Attend	--	0.0	0.0
Striker	138	6.1	25.6
General Detail	790	35.1	19.3
Total	2,251	100.0	24.8
Sea/Shore Status			
Sea Duty	97	3.9	29.8
Shore Duty	2,415	96.1	25.3
Total	2,512	100.0	25.5

[a]See Appendix Q for rating distribution of women who have attrited from Non-traditional Ratings.

Of the Attrite Population (N = 9,857), 74.5 percent of Navy enlisted women had attrited from Traditional Ratings while 25.5 percent attrited from Non-traditional Ratings. In terms of the representativeness of categories for those individuals in Traditional Ratings, Blacks and 19-year-olds were over-represented among women Attrites from Traditional Ratings, 83.2 and 84.2 percent, respectively, while Mental Group Category II's were under-represented at 64.1 percent. The analysis of Attrites from Non-traditional Ratings revealed that Blacks were under-represented at 16.8 percent among women Attrites from Non-traditional Ratings and Mental Group Category II's were over represented at 35.9 percent.

TABLE 43

Characteristics of Navy Enlisted Females Who Have Attrited from Non-traditional Ratings by Paygrade, Term of Enlistment, and Type of Acquisition

Subgroup	N	Distribution Within Variable Class	Representativeness of Total Subgroup Population
Paygrade			
E-9	--	0.0	0.0
E-8	--	0.0	0.0
E-7	3	0.1	37.5
E-6	16	0.6	28.1
E-5	202	8.1	28.9
E-4	522	20.8	32.8
E-3	614	24.5	26.0
E-2	481	19.1	27.6
E-1	674	26.8	19.9
Total	2,512	100.0	25.5
Term of Enlistment			
2 Year	51	2.0	28.3
3 Year	29	1.2	27.1
4 Year	2,300	91.6	25.1
5 Year	7	0.2	21.9
6 Year	125	5.0	33.5
Total	2,512	100.0	25.5
Type of Acquisition (Missing Observations = 41)			
Non-prior Service	306	12.4	29.9
Reenlisting USN	31	1.3	29.0
Prior Naval Ser.	40	1.6	28.8
Delayed Entry Prog.	2,014	81.5	24.7
USNR Enlistment	80	3.2	31.0
Total	2,471	100.0	25.5

The variables of A-School Attendance and Sea/Shore Status are displayed in Table 39 for Traditional Ratings and 42 for Non-traditional Ratings. There was a sharp difference with regard to A-School attendance. An enlisted woman was more likely to attrite from a Traditional Rating

if she had been assigned to General Detail[7] (48.8 percent) whereas a woman in a Non-traditional Rating was more likely to attrite if she had attended A-School (53.1 percent). The other variable was as expected; the average woman was most likely to be assigned to Shore Duty.

Tables 40 and 43 show the distribution of other variables for women who had attrited from Traditional and Non-traditional Ratings. E-1 (37 percent) was the most common paygrade of attriting women from Traditional Ratings while E-1 at 26.8 percent and E-3 at 24.5 percent were the most common paygrades of Attrites from Non-traditional Ratings. Enlistees from the Delayed Entry Program having a four-year Term of Enlistment were predominant for both Traditional and Non-traditional Ratings.

E. THE BIG PICTURE

Tables 44, 45, and 46 are provided for a general overview of data presented thus far. Listed in each column are the characteristics of the majority of women in each of the populations studied, e.g., the "typical" woman currently on active duty and at sea is White, 23 years of age or older, in Mental Group III-lower, etc. The tables also provide a means for quick comparison of the typical Navy female recruit and the typical Navy enlisted female in the Total Population, as well as the categories of the typical Navy enlisted female who stays or attrites. Each subdivision (Sea, Shore, Traditional, Non-traditional) is compared to its respective total group (e.g., Attrites from Traditional Ratings are contrasted with the total group of Attrites).

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[7]The definition of Traditional Ratings used in this study included SN, SA, and SR, accounting for the apparent discrepancy of a woman being considered in a Traditional Rating and General Detail at the same time.

TABLE 44

The Typical Navy Female Recruit as Compared to the Typical Navy Female Within the Total Population

Recruits[a]	Total Population[b]
White	White
20-22 Years Old	$\geq$ 23 Years Old
Mental Group III-Lower	Mental Group III-Lower
HSG	HSG
General Detail	A-School
Shore	Shore
Traditional Rating	Traditional Rating
Dependents[c]	No Dependents
E-1	E-3
Four Year Term	Four Year Term
Delayed Entry	Delayed Entry

[a]First records of enlisted women with active duty service dates between March 1978 and June 1981 (N = 32,225).

[b]All Navy enlisted females who were either on active duty as of June 1981 or who attrited between March 1977 and June 1981.

[c]Recall dependency status variable is questionable owing to significant number of missing values.

TABLE 45

Typical Active Duty Navy Enlisted Female From the Total Population as Compared to Active Duty Female at Sea/Shore Commands and in Traditional/Non-traditional Ratings

Total Active Duty Population	Shore Commands	Sea Commands	Traditional Ratings	Non-Traditional Ratings
White	White	White	White	White
≥ 23 Years	≥ 23 Years	≥ 23 Years	≥ 23 Years	≥ 23 Years
MG III-U/L	MG III-U/L	MG III-L	MG III-L	MG III-U
HSG	HSG	HSG	HSG	HSG
A-School	A-School	A-School	A-School	A-School
Shore	--[d]	--	Shore	Shore
Trad.[a]	Trad.	Trad.	--	--
0 Dep.[b]	0 Dep.	0 Dep.	0 Dep.	0 Dep.
E-3	E-3	E-4	E-3	E-3
4 Yr Term	4 Yr Term	4 Yr Term	4 Yr Term	4 Yr Term
Del. Entry[c]	Del. Entry	Del. Entry	Del. Entry	Del. Entry

[a]Traditional Ratings.

[b]No Dependents.

[c]Delayed Entry Program.

[d]Not Applicable.

TABLE 46

Typical Navy Enlisted Female Attrite Compared to Navy Female Enlisted Attrites from Sea, Shore, Traditional and Non-traditional Ratings

Total Attrite Population	Shore Commands	Sea Commands	Traditional Ratings	Non-Traditional Ratings
White	White	White	White	White
≥ 23 Years	≥ 23 Years	≥ 23 Years	≥ 23 Years	≥ 23 Years
MG III-L	MG III-L	MG III-U/L	MG III-L	MG III-U/L
HSG	HSG	HSG	HSG	HSG
A-Sch/GenDet	A-Sch/GenDet	A-School	GenDet	A-School
Shore	--[d]	--	Shore	Shore
Trad.[a]	Trad.	Trad.	--	--
0 Dep.[b]	0 Dep.	0 Dep.	0 Dep.	0 Dep.
E-1	E-1	E-4	E-1	E-1/E-3
4 Yr Term	4 Yr Term	4 Yr Term	4 Yr Term	4 Yr Term
Del. Entry[c]	Del. Entry	Del. Entry	Del. Entry	Del. Entry

[a]Traditional Ratings.

[b]No Dependents.

[c]Delayed Entry Program.

[d]Not Applicable.

F. WHY THEY LEAVE

Binken and Bach have observed that "Traditionally, one of the strongest arguments against expanding the number of women in the military has been their tendency to leave the service before completing their first enlistment." [Ref. 1]

Billet vacancies resulting from attrition are costly, both in terms of miltary readiness and the expense involved with training replacement personnel. The following discussion addresses the reasons for attrition encountered during the study of Navy enlisted women having data on the Survival Tracking File.

Out of the Total Population of Navy enlisted women (43,179), 9,853 were defined as having attrited sometime between the beginning of fourth quarter FY 1977 and the end of the third quarter FY 1981 The Survival Tracking File indicates losses with a six-column alphanumeric code; the first three columns hold a three-digit number indicating a Navy Loss Code, while the following three columns contain a three-letter Department of Defense Loss Code. Codes representing losses such as Expiration of Term of Enlistment, General Reduction of Strength, or Early Release under Special Programs are not generally considered attrition and have been eliminated from this discussion (see Appendix R for a complete listing of attrite loss codes).

The Defense Manpower Data Center (DMDC) has devised a separation code grouping (Table 47), which will be a general guideline for the following remarks. Reasons for discharge have been combined into the general categories of Release from Active Service, Medical Disqualification, Dependency or Hardship, Death, Entry into Officer Programs,

TABLE 47

Defense Manpower Data Center Interservice
Separation Codes (Enlisted)

Transaction (Immediate Reenlistment, Enlistment Extention, Dropped from Rolls, Record Correction) or Unknown

0 Release from Active Service

Expiration of Term of Service
Early Release--Insufficient Retainability
Early Release--To Attend School
Early Release--Police Duty
Early Release--In the National Interest
Early Release--Seasonal Employment
Early Release--To Teach
Early Release--Other (Including RIF)

1 Medical Disqualification

Conditions Existing Prior to Service
Disability--Severence Pay
Permanent Disability--Retired
Temporary Disability--Retired
Disability--Non EPTS--No Severance Pay
Disability--Title 10 Retirement
Unqualified for Active Duty--Other

2 Dependency or Hardship

Dependency
Hardship
Dependency or Hardship

3. Death

Battle Casualty
Non-Battle--Disease
Non-Battle--Other
Death--Cause Not Specified

4 Entry into Officer Programs

Officer Commissioning Program
Warrant Officer Program
Service Academy

5 Retirement (Other than Medical)

20-30 Years of Service
Over 30 Years of Service
Other

6 Failure to Meet Minimum Behavioral of Performance Criteria

Character or Behavior Disorder
Motivational Problems
Enuresis
Inaptitude
Alcoholism
Discreditable Incident--Civilian or Military
Shirking
Drugs
Financial Irresponsibility
Lack of Dependent Support
Unsanitary Habits
Civil Court Conviction
Security
Court Martial
Fraudulent Entry
AWOL, Desertion
Homosexuality
Sexual Perversion
Good of the Service
Juvenile Offender
Misconduct (Reason Unknown)
Unfitness (Reason Unknown
Unsuitability (Reason Unknown)
Basic Training Attrition
Failure to Meet Minimum Qualifications
Expeditious Discharge
Trainee Discharge

9 Other
Secretarial Authority
Erroneous Enlistment or Induction
Sole Surviving Son
Marriage
Pregnancy
Minority
Conscientious Objector
Parenthood
Breach of Contract
Other

Retirement (Other than Medical), and Failure to Meet Minimum Behavioral or Performance Criteria. Again, because they are not included in the definition of attrition, Release from Active Service and Retirement will be omitted from this discussion.

Looking at Table 48, reasons for attrition among Navy enlisted women encountered on the Survival Tracking File may be seen. Medical Disqualification, which includes all disability categories, accounted for 5.27 percent of Navy enlisted female attrition. Interestingly, the category claiming the most attrites within this division was Disability which existed prior to entry in the service (2.38 percent).

Dependency or Hardship categories were 1.95 percent of attrition, Death claimed 0.50 percent, and Officer Programs took 2.49 percent of attriting enlisted women.

One of the broadest of DMDC's general categories, Failure to Meet Minimum Behavioral or Performance Criteria, was responsible for 38.42 percent of enlisted female attrition. Most notable were Burden To Command-Substandard Performance (16.67 percent) and Personality Disorder (9.38 percent). Drug and Alcohol Abuse, together, accounted for only 0.61 percent of attriting Navy enlisted women.

The largest groups of Attrites fell into the "Other" category and, as expected, Pregnancy accounted for a significant portion of the attrition (39.29 percent). Erroneous Enlistment immediately followed Pregnancy at 11.56 percent.

G. CORRELATION ANALYSIS OF FISCAL YEAR 1978 NAVY ENLISTED FEMALE COHORT

Pearson Product-Moment correlations were computed among pre-service and in-service variables for the FY 1978 Navy enlisted female cohort.

TABLE 48

Reasons for Attrition Among Navy Enlisted Females[a]

Reason	DMDC Code	Percent[b]
Disability, misconduct, no severence pay	1	0.041
Disability, severence pay	1	2.243
Disability, not EPTES[c], no severence, PEB[d]	1	0.030
Disability, misconduct	1	0.010
Disability, EPTES, no severence pay, MED[e]	1	2.375
Obesity		0.436
Physical condition interferes with performance of duty	1	0.132
Total Code 1		5.267
Dependency, hardship, convenience of government	2	1.015
Hardship	2	0.294
Demonstrated Dependency	2	0.639
Total Code 2		1.948
Death	3	0.497
Office/warrant officer commission	4	0.609
Aviation officer candidate	4	0.041
Officer programs	4	1.634
Enter Naval Academy	4	0.203
Total Code 4		2.487
Financial irresponsibility	6	0.041
Drug abuse (not alcohol)	6	0.030
Various naval board actions (NMPC)[f]	6	0.233
Inaptitude	6	0.030
Unsanitary habits	6	0.030
Homosexual tendencies	6	0.396
Burden to command, substandard performance	6	16.665
Substandard personal behavior	6	0.233
Apathy, defective attitude	6	1.614
Alcohol abuse	6	0.304
Personality disorders	6	9.378
Shirking	6	0.020
Frequent involvement with civilian/military authorities	6	1.705
Convicted by civil court	6	0.132
Homosexual acts	6	2.984
Failure to pay just debts	6	0.010
Fraudulent enlistment	6	1.127
Drug abuse	6	0.274
For the good of the service	6	0.924

Reason	DMDC Code	Percent[b]
Unauthorized absence	6	0.101
Special court martial	6	0.162
General court martial	6	0.030
Desertion	6	1.928
Total Code 6		38.420
Convenience of the government	9	0.345
Conscientious objector	9	0.041
Minority	9	0.030
Alien	9	0.051
Erroneous enlistment	9	11.560
Good reasons (as determined by Secretary)	9	0.071
Pregnancy	9	39.288
Parenthood	9	0.061
Total Code 9		51.447

[a]All Navy enlisted women who attrited any time between fourth quarter FY 1977 and third quarter FY 1981.

[b]Percent of all attrites from total population.

[c]Existing prior to entry into service.

[d]Physical examination board.

[e]Medical board.

[f]Naval Military Personnel Command.

Correlation analysis was used not only to measure the strength of the relationship between the variables, but also because correlations were helpful in determining whether variables should be included in the stepwise regression analyses. Correlation coefficients can range in value from 1 to -1. A correlation coefficient close to 1 would mean that the two variables are highly positively correlated, i.e., observations that have high values of one variable also have high values on the other. A

correlation coefficient near zero means there is little correlation between the values of the two variables. Correlation coefficients close to -1 mean that the variables are negatively correlated, i.e., high values of one variable are associated with low values of the other variable.

Table 49 defines the pre-service, in-service, and dependent variables used for the FY 1978 female enlistment cohort; the correlation matrix may be found in Table 50. Due to the large sample size (N = 5,358), almost all correlations were found to be significant in this instance. However, only those variables with $r = 0.200$ ($p < 0.01$) will be discussed.

Three variables are highly correlated with the dependent variable, Attrite: GenDet ($r = 0.549$), Scha ($r = -0.264$), and Shore ($r = 0.203$). In other words, Navy enlisted women who attrite tend to be GenDet's (and, therefore, less likely to be A-School graduates) assigned to a Shore based Command. Another correlation of note is the relationship between AFQT score and Race (White) ($r = 0.224$). Two negative correlations found to be significant (but not unexpected) were those between GED and HS ($r = -0.791$) and GenDet and Scha ($r = -0.577$).

H. REGRESSION ANALYSES

Much has been done in the way of describing a male recruit's chances of surviving his initial term of obligated service. Robert Lockwood's proposed SCREEN (Success Chances for Recruits Entering the Navy) tables are currently at recruiting commands and have been useful in establishing or modifying recruiting policies [Ref. 9]. James Thomason has further described the relationship between survival chances and given male recruit characteristics with respect to differences across ratings

TABLE 49

Definitions of Variables Used for the Correlation Analysis

Variable	Definition
Attrite	1 = if female attrited as of June 1981; 0 = if the female is on active duty
AFQT	Armed Forces Qualification Test score
HS[a]	1 = if female is a high school graduate; 0 = if not
GED[a]	1 = if female has a General Education Degree (high school diploma equivalent); 0 = if not
Scha[b]	1 = if female did attend A-School; 0 = if not
GenDet[b]	1 = if female is a General Detail; 0 = if not
Trad	1 = if female is assigned to a traditional rating; 0 = if not
Shore	1 = if female is assigned to Shore Duty; 0 = if female assigned to Sea Duty
Age	Age (in months) as of June 1981
White	1 = if female is Caucasian; 0 = if female is minority

[a]Those women who were in neither category had some college; these values were subsumed in the constant.

[b]Those women who were in neither category were designated as strikers; these values were subsumed in the constant.

TABLE 50

Correlation Matrix for FY 1978 Navy Enlisted Female Cohort[a]

	Attrite	AFQT	HS	GED	Scha	GenDet	Trad	Shore	Age	White
Attrite	1.000	-[b]	-	-	-	-	-	-	-	-
AFQT	-0.042	1.000	-	-	-	-	-	-	-	-
HS	-0.105	-0.052	1.000	-	-	-	-	-	-	-
GED	0.121	-0.048	-0.791	1.000	-	-	-	-	-	-
Scha	-0.264	0.143	0.053	-0.074	1.000	-	-	-	-	-
GenDet	0.549	-0.141	-0.078	0.123	-0.577	1.000	-	-	-	-
Trad	0.132	-0.184	-0.002	0.028	-0.160	0.232	1.000	-	-	-
Shore	0.203	-0.010	-0.037	0.033	-0.114	0.155	0.041	1.000	-	-
Age	-0.010	0.168	-0.171	-0.032	-0.019	0.0004	-0.049	0.031	1.000	-
White	0.045	0.224	-0.023	0.047	0.034	0.022	-0.057	-0.020	-0.055	1.000

[a]N = 5,358.

[b]Since the data in the table is symmetrical, only half of the table is displayed.

[Ref. 10]. This type of information is invaluable to policymakers but, unfortunately, little is available when it comes to discussing the female recruit. The Navy's concern about first-term attrition is understandably great, not only in terms of readiness, but also in terms of cost in getting one recruit to a first duty station; in FY 1978 that figure was estimated to be over $5,000.

With the idea in mind that Navy enlisted women will be occupying greater numbers and types of jobs, such screening devices clearly become more and more necessary. For these reasons, multiple regression analyses were undertaken in an attempt to predict Navy female enlisted attrition.

Multiple regression analysis, because it enables one to analyze the relationship between some dependent variables and a set of independent, or predictor, variables was felt to be the next step in this particular study of Navy enlisted women [Ref. 11]. Since a stepwise multiple regression is useful when selecting from many independent variables which are potential candidates for a regression model, this procedure was undertaken. In the case of stepwise regression, variables are entered into the model, one by one, on the basis of a minimum entry level significance of the F-Statistic. (In this case, 0.05 was used.) Each time a variable is added, the entire model is re-evaluated. Any variable in the new model without a significant F-Statistic at the "Stay" level is deleted. The method then moves to the next variable to be considered for entry. The procedure ends when no variable has a F-Statistic significant enough for entry, or when the variable just entered is the same one which is to be deleted [Ref. 7].

Cross-tabulation and frequency distributions of Navy enlisted female Attrites from the Total Population highlighted certain groups of women for investigation in the multiple regression analyses:

1. The SN, SA, and SR rating had a first term attrition rate over 40 percent. Multiple regression analysis was used to determine possible differences between SN's, SA's and SR'S versus other E-1's, E-2's and E-3's, and to observe for differences between the SN, SA, and SR Attrite Population versus the SN, SA, and SR Stay Population.

2. E-1's showed a first term attrition rate of over 42 percent with more than two-thirds of the losses occuring during boot camp. Multiple regression was used here to distinguish between boot camp losses versus non-boot camp losses, and E-1 boot camp losses versus those E-1's who stayed.

Finally, to facilitate later comparisons with a male cohort and to formulate an overall model to predict attrition among enlisted women, a FY 1978 cohort of Navy enlisted women was isolated for multiple regression analysis.

1. Regression Analyses for Navy Enlisted Female Seamen, Seaman Apprentices, and Seaman Recruits

a. Attrites Versus Stays

A cross-tabulation performed on attrition by rank and rate resulted in Seamen (SN), Seaman Apprentices (SA), and Seaman Recruits (SR) accounting for over 40 percent of the Attrites (see Appendix S). Therefore, a stepwise regression analysis was done in an attempt to better distinguish between stayers and leavers among Navy enlisted females who were SN's, SA's, or SR's. Table 51 presents the definitions of the dependent and independent (traditional) variables used in the regression. The dependent variable is Attrite and represents those Seamen, Seaman Apprentices, or Seaman Recruits who either attrited (= 1) or who were on active duty (=0) as of June 1981. The zero values for the

TABLE 51

Definitions of Variables Included in Regression Analysis Reported in Table 52

Variable	Definition
Attrite (dependent variable)	1 individual who is a SN, SA, or SR and attrited as of June 1981 0 individual who is a SN, SA, or SR and on active duty as of June 1981
GED	1 individual possessed a GED 0 individual did not possess a GED
HS	1 individual had a high school degree 0 individual did not have a high school degree
White	1 individual was Caucasian 0 individual was a minority
Age	Age as of June 1981 in months from 205 to 503 (continuous independent variable)
AFQT	Armed Forces Qualification Test score from 10 to 99 (continuous independent variable)

independent variables in the table represent the women with the least common characteristics as depicted by the frequency distribution presented in earlier discussions; zero values are subsumed in the constant.

Regression analysis results utilizing only traditional, or pre-service, variables (the Dependency variable was excluded owing to the large number of missing values) for the Navy SN's, SA's, and SR's are presented in Table 52. Four variables, Age, AFQT, White, and GED were found to be significant (have significant regression coefficients), but

they accounted for only 9.2 percent of the variance in attrition (HS was not significant at the 0.05 percent level). The resultant model was: Attrite = -0.335 + 0.003Age - 0.004AFQT + 0.171White + 0.161GED. So, for instance, of SN's, SA's, and SR's who attrited during their first enlistment, older Caucasian women possessing GED's and scoring lower on the AFQT were more likely to attrite than younger, minority women who possessed either a high school degree or some college and scored higher on the AFQT. A gain of approximately 5 points on the AFQT score would be expected to yield a 2 percent decrease in expected attrition. An increase of 1 year of age would raise the probability of attriting by about 4 percent, while being Caucasian and possessing a GED increased the chance of attrition by 17 percent and 16 percent, respectively, other things being equal.

b. Seamen, Seaman Apprentices, and Seaman Recruits Versus E-1's E-2's, and E-3's in Other Ratings

In order to determine whether it might be possible to distinguish between SN's, SA's, and SR's and E-1's, E-2's, and E-3's in other ratings, a stepwise regression analysis was done. Table 53 presents the definitions of the dependent and independent variables used in the regression. SNSASR is the dependent variable and represents either Seamen, Seaman Apprentices, and Seaman Recruits (= 1) or E-1's, E-2's, and E-3's in other ratings (= 0) as of June 1981.

Regression results with traditional variables are presented in Table 54. All variables--AFQT, White, HS, GED, and Age--were significant at the 0.05 level; however, the model (SNSASR = 0.547

TABLE 52

Stepwise Regression Results for Traditional Variables[a]--
Navy Enlisted Females Who Are Seamen, Seaman Apprentices,
or Seaman Recruits and Either Attrited or Were on Active Duty[b]

	Attrite/Stay[c]	R^2	F-Statistic[d]
Constant	-0.335	0.092	278.58
	Regression Coefficients[d]		
Age	0.003		
AFQT	-0.004		
White	0.171		
GED	0.161		
HS	--[e]		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]SN, SA, or SR N = 10,969. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is Attrite.

[d]Significant at the 0.05 level.

[e]Not significant (not entered into the equation).

+ 0.001AFQT - 0.043White - 0.084HS - 0.064GED - 0.0002Age) only accounted for 0.4 percent of the variance.

2. Regression Analyses for Navy Enlisted Females in Paygrade E-1

a. Attrites During and After Boot Camp

One of the frequency distribution findings was that over 42 percent of the Navy enlisted female E-1's attrited during their first

TABLE 53

Definitions of Variables Included in Regression Analysis Reported in Table 54

Variable	Definition
SNSASR (dependent variable)	1 = individual who was an SN, SA, or SR as of June 1981 0 = individual who was an E-1, E-2, or E-3 (in other ratings) as of June 1981
GED	1 = individual possessed a GED 0 = individual did not possess a GED
HS	1 = individual had a high school degree 0 = individual did not have a high school degree
White	1 = individual was Caucasian 0 = individual was a minority
Age	Age as of June 1981 in months from 205 to 503 (continuous independent variable)
AFQT	Armed Forces Qualification Test score from 10 to 99 (continuous independent variable)

term of enlistment (see Table 31). In a sense, a high attrition percentage among E-1's is not surprising, since E-1's can only be promoted, leave the Navy, or stay E-1's. Those who stay E-1 very long, or who are demoted to E-1, are probably marginal performers with a high probability of attriting. A further examination of the E-1's who attrited indicated that approximately two-thirds were lost during boot camp as shown in Table 31 and Appendix T. A stepwise regression equation was utilized to determine whether it was possible to distinguish between enlisted female E-1's who attrited during boot camp and the enlisted female E-1's who attrited after boot camp. Table 55 presents the definitions of the

TABLE 54

Stepwise Regression Results for Traditional Variables[a]--
Navy Enlisted Females Who Were Either Seamen, Seaman Apprentices,[b]
or Seaman Recruits Versus E-1's, E-2's, or E-3's in Other Ratings

	SN, SA, SR/ E-1, E-2, E-3[c] Attrite	R^2	F-Statistic[d]
Constant	0.547	0.004	19.73
	Regression Coefficient[d]		
AFQT	0.001		
White	-0.043		
HS	-0.084		
GED	-0.064		
Age	-0.0002		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]E-1, E-2, and E-3 N = 25,593. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is SNSASR.

[d]Significant at the 0.05 level.

definitions of the dependent and independent variables used in the regression. Elloss is the dependent variable and indicates whether a female E-1 attrited during boot camp (=1) or attrited after boot camp (= 0), including the period between March 1978 through June 1981. The zero values for the independent variables in the table represent the female E-1's with the least common characteristics as

TABLE 55

Definitions of Variables Included in Regression Analysis Reported in Table 56

Variable	Definition
Elloss (dependent variable)	1 = individual attrited during boot camp 0 = individual attrited after boot camp (covering period March 1978 to June 1981
GED	1 = individual possessed a GED 0 = individual did not possess a GED
HS	1 = individual had a high school degree 0 = individual did not have a high school degree
White	1 = individual was Caucasian 0 = individual was a minority
Age	Age as of June 1981 in months from 205 to 503 (continuous independent variable)
AFQT	Armed Forces Qualification Test score from 10 to 99 (continuous independent variable)

outlined by the frequency distributions presented earlier, and the zero values are subsumed in the constant.

Regression results that used only traditional variables (with the exclusion of the Primary Dependency variable) are presented in Table 56. Two variables, out of five, white and GED, were found to be significant, (HS, Age, and AFQT were not found significant at the 0.05 level), but they accounted for only 0.7 percent of the variance. The model was Elloss = 0.779 - 0.082White - 0.053GED.

b. Attrites Versus Stays

A stepwise regression analysis was then performed to determine whether a distinction could be made between those Navy enlisted female

TABLE 56

Stepwise Regression Results for Traditional Variables[a]--
Navy Enlisted Females Who Are E-1's and Either[b] Attrited in
Boot Camp or Attrited After Boot Camp

	Attrite In/ Attrite After[c] Boot Camp	R^2	F-Statistic[d]
Constant	0.779	0.007	11.14
	Regression Coefficient[d]		
White	-0.082		
GED	-0.053		
HS	--[e]		
Age	--[e]		
AFQT	--[e]		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]E-1's N = 3,280. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is Elloss.

[d]Significant at the 0.05 level.

[e]Not significant (not entered into the equation).

E-1's who attrited in boot camp and those E-1's who were still on active duty as of June 1981. The definitions of the dependent and independent (traditional) variables used in the regression are presented in Table 57. Eloss is the dependent variable is is defined as an E-1 who attrited during boot camp (=1) or is still on active duty (=0).

TABLE 57

Definitions of Variables Included in Regression Analysis Reported in Table 58

Variable	Definition
Elloss (dependent variable)	1 = individual attrited during boot camp, covering period March 1978 through June 1981
	0 = individual on active duty as of June 1981
GED	1 = individual possessed a GED 0 = individual did not possess a GED
HS	1 = individual had a high school degree 0 = individual did not have a high school degree
White	1 = individual was Caucasian 0 = individual was a minority
Age	Age as of June 1981 in months from 205 to 503 (continuous independent variable)
AFQT	Armed Forces Qualification Test score from 10 to 99 (continuous independent variable)

Regression results with traditional variables are outlined in Table 58. Four variables out of five, AFQT, Age, HS, and White, were found significant (GED was not significant at the 0.05 percent level) and accounted for 20.2 percent of the variance in attrition. The resultant model was Eloss = -0.009AFQT + 0.003Age - 0.207HS + 0.162White. So, for example, in comparing women E-1's still on active duty, older white women who did not possess high school degrees and score lower on the AFQT were more likely to attrite than stay. An increase of one year of age raises the probability of attriting during boot camp by about 4 percent.

TABLE 58

Stepwise Regression Results for Traditional Variables[a]--
Navy Enlisted Females Who Are E-1's and Attrited in Boot Camp
or Did Not Attrite[b]

	Attrite In Boot Camp/ Stay[c]	R^2	F-Statistic[d]
Constant	0.007	0.202	366.83
	Regression Coefficient[d]		
AFQT	-0.009		
Age	0.003		
HS	-0.207		
White	0.162		
Ged	--[e]		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]E-1's N = 5,800. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is Eloss.

[d]Significant at the 0.05 level.

[e]Not significant (not entered into the equation).

Being Caucasian raises the chance of attriting during boot camp by 16.2 percent. A gain of five points on the AFQT lowers the chance of attriting during boot camp by 4.5 percent. Having a high school degree also lowers the probability of attriting during boot camp by 20.7 percent.

3. Regression Analyses for Navy Enlisted Females Who Enlisted in Fiscal Year 1978

The Fiscal Year 1978 female cohort was used to permit the regression analysis to focus on a specific group of women. Also, later remarks will address a comparison between the FY 1978 enlisted female cohort and the FY 1978 enlisted male cohort. The first stepwise regression was done for the FY 1978 enlisted female cohort utilizing only pre-service (traditional) variables. Table 59 presents the definitions of the dependent and independent (pre-service and in-service) variables used in the regression. The dependent variable is Attrite and represents those women who entered the Navy in FY 1978 and attrited as of June 1981 (=1) versus those women who entered the Navy in FY 1978 and were still on active duty as of June 1981 (=0). The zero values for the independent variables in the table represent the women with the least common characteristics as shown by the frequency distributions presented in earlier discussions; the zero values are subsumed in the constant.

Regression results utilizing only pre-service variables (again, owing to the large number of missing values, the Dependency variable was excluded) for the Fiscal Year 1978 Navy enlisted female cohort are presented in Table 60. Three variables, GED, White, and AFQT, out of five were found significant (HS and Age were not significant at the 0.05 level), but they only accounted for 1.8 percent of the variance in cohort attrition. The model was Attrite = 0.306 + 0.174GED + 0.066White - 0.001AFQT. Therefore, the woman from the FY 1978 female cohort who attrited during her first term of enlistment was more likely to be white, possess a GED, and score lower on the AFQT than the FY 1978

TABLE 59

Definitions of Variables Included in Regression Analyses Reported in Tables 60 and 61

Variable	Definition
Attrite (dependent variable)	1 = individual who entered the Navy in FY 1978 and attrited as of June 1981 0 = individual who entered the Navy in FY 1978 and was on active duty as of June 1981
GED	1 = individual possessed a GED 0 = individual did not possess a GED
HS	1 = individual had a high school degree 0 = individual did not have a high school degree
White	1 = individual was Caucasian 0 = individual was a minority
Age	Age as of June 1981 in months from 237 to 435 (continuous independent variable)
AFQT	Armed Forces Qualification Test score from 11 to 99 (continuous independent variable)
Scha	1 = individual did attend A-School 0 = individual did not attend A-School
GenDet	1 = individual was General Detail 0 = individual was not General Detail
Trad	1 = individual is in a Traditional Rating 0 = individual is in a Non-traditional Rating
Shore	1 = individual assigned to Shore Duty 0 = individual assigned to Sea Duty

TABLE 60

Stepwise Regression Results for Traditional Variables[a]--
Navy Enlisted Females Who Accessed During FY 1978[b]

	Attrite/Stay[c]	R^2	F-Statistic[d]
Constant	0.306	0.018	33.32
	Regression Coefficient[d]		
GED	0.174		
White	0.066		
AFQT	-0.001		
HS	--[e]		
Age	--[e]		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]FY 1978 Cohort N = 5,358. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is Attrite.

[d]Significant at the 0.05 level.

[e]Not significant (not entered into the equation).

still on active duty. While being White or having a GED increased the probability of attriting (6.6 percent and 17.4 percent, respectively), a ten point gain on the AFQT score lowered the chance of attriting by 1 percent.

When in-service variables were included, the increase in the R^2 value to 32.6 percent was noteworthy. Table 61 presents the stepwise regression results. Five variables out of nine, GenDet, Shore, Scha, HS,and White were found to be significant (AFQT, GED, Trad, and Age

TABLE 61

Stepwise Regression Results for Traditional Variables[a]--
Plus A-School Attendance, General Detail Assignment,
Traditional/Non-traditional Ratings, and Sea/Shore Duty[b]

	Attrite/Stay[c]	R^2	F-Statistic[d]
Constant	-0.007	0.326	518.74
	Regression Coefficient[d]		
GenDet	0.690		
Shore	0.178		
Scha	0.078		
HS	-0.075		
White	0.073		
AFQT	--[e]		
GED	--[e]		
Trad	--[e]		
Age	--[e]		

[a]Primary Dependency Variable was not included due to the large number of missing values.

[b]FY 1978 Cohort N = 5,800. Variables with missing values were not included in the stepwise regression.

[c]The dependent variable is Attrite.

[d]Significant at the 0.05 level.

[e]Not significant (not entered into the equation).

were not significant at the 0.05 percent level). The new model was

Attrite = -0.007 + 0.690GenDet + 0.178Shore + 0.078Scha - 0.075HS +

0.073White. So, for instance, of the FY 1978 women who attrited during

boot camp during their first term of enlistment, women were more likely to attrite if they were White GenDet's (though A-School attendance was also a factor), were assigned to a shore-based command, and were without a high school degree. A woman from the FY 1978 cohort who was White, a GenDet or attended A-School, and assigned to a shore command increased the probability she would attrite by 7.3, 69.0, 7.8, and 17,8 percent, respectively, other things being equal. Having a high school degree lowered the chance of attriting by 7.5 percent. These findings correspond with the frequency distributions results reported earlier (see Tables 29 through 31).

IV RECOMMENDATIONS AND CONCLUSIONS

"The Joint Chiefs of Staff, in both World War II and Korea, asked for authority to draft women. Women are a large source of personnel, and when you are starting to get squeezed. . . . When you are starting to draft 45-year-old men, like we did in World War II, you kind of drool over 18 to 20-year-old women. That pool of untapped womanpower looks like a very attractive way to meet your force profiles." [Ref. 4]

There are those who disagree with the above statement made by Dr. Richard Hunter. They feel that womanpower is not at all an attractive alternative for meeting increasing military manpower requirements. One of the major complaints against expanding the role of military women has been their propensity for leaving the service before completing their first term of obligated service. As if that isn't bad enough, say these skeptics, what about potential lost time which will result from pregnancy and maternity leave?

As mentioned earlier, perhaps the differences between men and women on the job are matters of perception, or at least are differences not poured in concrete and may lend themselves to change. The important thing is to begin collecting data so that differences may be more clearly defined.

Since attrition is such a problem within the military, and because male/female differences in this area have been an issue, it was felt that some comparison of male/female attrition data would be helpful. The 1978 Navy male enlisted cohort loss codes were obtained from the Defense

Manpower Data Center (DMDC) and compared to the 1978 female enlisted cohort loss codes from the Survival Tracking File. Because the male cohort (N = 58,623) was so much larger than the female cohort (N = 5,358), some of the comparisons may not be entirely parallel, but they are a beginning.

Out of 58,623 Navy enlisted male accessions during FY 1978, 13,190 (or 22.5 percent) had attrited by September of 1980. Of the 5,358 Navy enlisted female accessions in FY 1978, 1,783 (or 33.3 percent) had attrited by June of 1981. While the overall female attrition percentage is higher than for the male cohort, it must be kept in mind that isolation of a specific time frame on the STF was not possible. The female group, therefore, contains nine more months of data than the 1978 male cohort. If given an extra nine months of service, the male attrition rate might easily have equaled that of the females.

In comparing reasons for attrition, the men and women had very different distributions within general DMDC categories (refer to Table 47). Again, Retirement and Expiration of Obligated Service are not considered attrition and will not be discussed. (See Figure 2.) Percentages mentioned within the following paragraphs were calculated using as a base the total number of losses, or attrites, from the appropriate 1978 cohort (male or female).

Disability claimed 8.6 percent of the 1978 enlisted male cohort attrition, while accounting for only 4.43 percent of the female losses.

Category 2, Dependency and Hardship, was 0.66 percent of male and 1.68 percent of female losses. Death for males and females was 1.2 and 0.28 percent of losses, respectively.

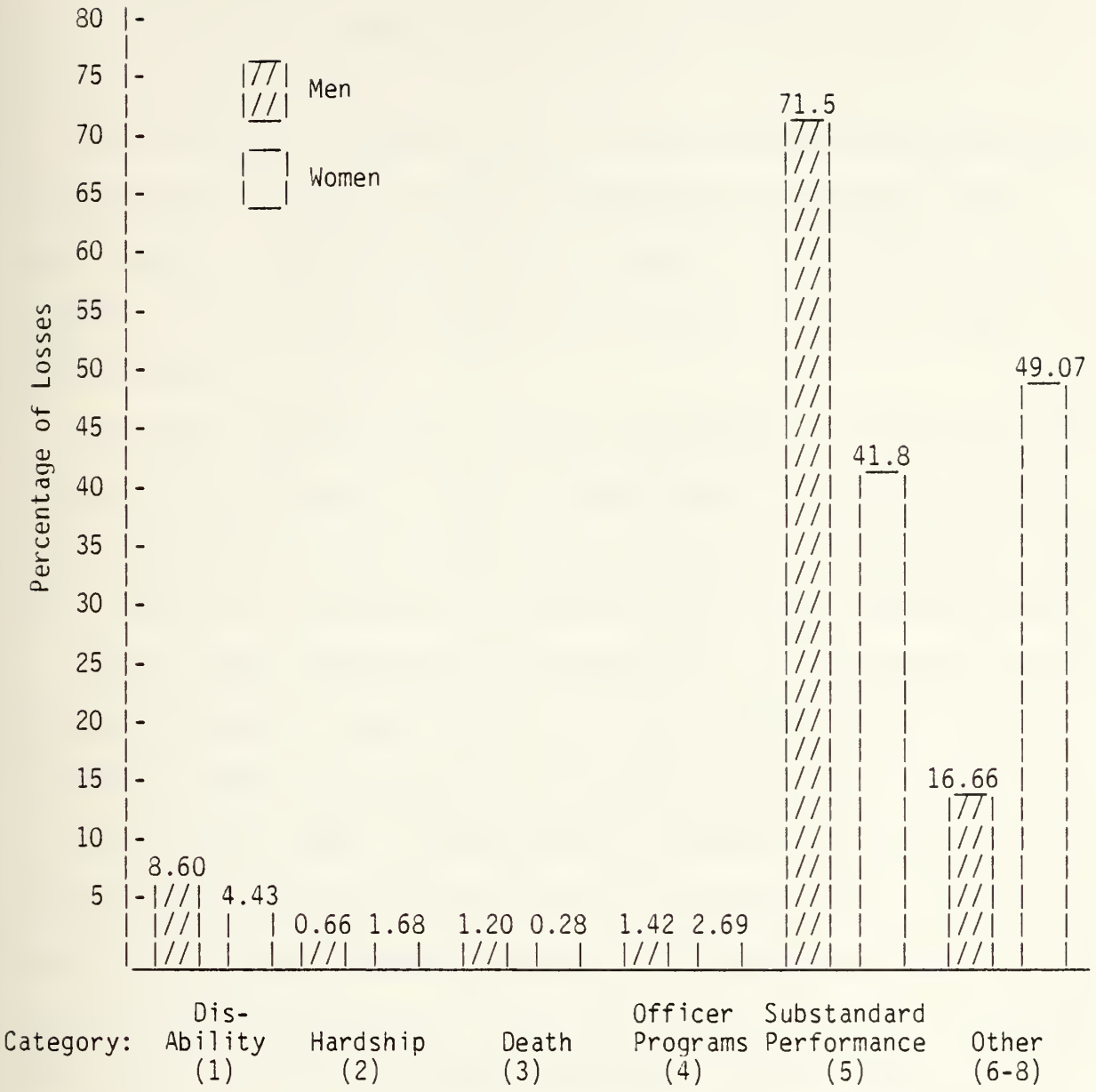

Figure 2. Comparison of FY 1978 Male and Female Enlisted Loss Code Distributions

Movement to officer programs accounted for 1.42 percent of the 1978 male enlisted cohort losses and 2.69 percent of those in the 1978 female enlisted cohort.

The percentages in Categories 6-8, Failure to Meet Minimum Behavioral or Performance Criteria, were quite different for the male and female cohort groups. The 1978 males had 71.6 percent of their losses in this category while the females listed only 41.83 percent of their losses in the same group.

The "Other" category, which, in the case of women, includes Pregnancy, was also quite disparate for the two cohort groups; of the male losses, 16.6 percent were in this category, while females had 49.07 percent listed here. Pregnancy alone was over 39 percent of the "Other" female losses.

Clearly, these losses need further study, not only for identification of emerging negative trends, but also to provide the basis for more educated statements about women as a cost effective alternative to military manpower needs. Do women become "dropouts" at a faster rate than men, and if so, why? Even in the case of males alone, with overall attrition rates over 20 percent and more than 70 percent of those falling into substandard performance of disciplinary problem categories, it would seem there is a need for further investigation. Binkin suggests that, for the time being, a higher male involvement with drugs and/or alcohol more than compensates (or even surpasses) female lost time for reason of pregnancy [Ref. 1]. As the numbers of military women continue to expand, however, their behavior with respect to drug/alcohol abuse and disciplinary problems may begin to look more like that of the male population.

Recruiters have said more than once that the number of women desiring to gain entrance into the Navy far exceed what the military has established in the way of limits. Fiscal Year 1978 saw the armed services accepting only 48 percent of the women who applied for enlistment. This would suggest, then, that the services have the option of selecting from the vast number of applicants only those women who would make "high quality" sailors. As stated in the foregoing analyses, over 34 percent of the Total Population attrition occured in the E-1 paygrade. The E-1's, as a group, lost 49 percent of their enlistees during the first term, with over two-thirds of those losses occuring during the first eight weeks of enlistment (presumably, this was during boot camp). In the face of such losses occuring at such an early stage, the necessity for better screening devices makes itself quite evident. Some type of screen table is clearly needed for women.

In terms of pre-service characteristics, the frequencies discussed in Section III describe a fairly homogeneous group of women. Efforts at reducing the attrition of Navy enlisted females, then, may have to pay more attention to in-service variables. Past studies have shown attrition rates for General Detail, or non-rated, navy enlisted personnel as being much higher than for those who have attended A-School. While this study strongly suggested similar trends, the statement of such a conclusion is made with some hesitance. As mentioned earlier, the possibility of several miscoded "first" records (i.e., individuals actually slated for A-School coded initially as General Detail) makes any conclusion concerning this group difficult to state--at least when using the Survival Tracking File. The relationship of occupation, e.g., General Detail, to

attrition of women is worthy of further research since, for males, it has been found to have a major relationship with attrition.

A high-ranking military officer recently stated to an audience, "Women in the Navy: you can't get away from it." Perhaps the sentence should read, "Women in the Navy: you can't do without it."

APPENDIX A

Enlisted Survival Tracking File (Longitudinal)

Data Elements	Length	Start
Social Security Number	9	1
As-of-Date Fiscal	2	10
Quarter	1	12
Count	2	13
Strength Indicator	1	15
Sex	1	16
Race	1	17
Ethnic Group	1	18
Date of Birth	4	19
AFQT (Armed Forces Qualification Test)	2	23
Education, Years	2	25
Education, Certification	1	27
A-School Indicator	1	28
Dependency, Primary	1	29
Term Enlistment	1	30
Type Enlistment	2	31
Term Status	1	33
Number of Enlistments	1	34
Type of Acquisition	2	35
Type of Program	1	37
Rate/Special Program Code	5	38
Branch/Class	2	43
RADO (Reserve Active Duty Obligation) Months	3	45
Enlisted Designator	1	48
Present Rate Code	4	49
Present Pay Code	1	53
PNEC (Primary Navy Classification Code)	4	54
SNEC (Secondary Navy Classification Code)	4	58
ADSD (Active Duty Start Date)	4	62
PEBD (Pay Entry Base Date)	4	66
CED (Current Enlistment Date)	4	70
CADD (Current Active Duty Date)	4	74
EAOS (Expiration of Active Obligated Service)	4	78
Soft EAOS	4	82
EAOS Change Indicator	1	86
Onboard Actual UIC (Unit Identification Code)	5	87
Onboard ACC (Accounting Category Code)	3	92
Onboard Sea/Shore Code	1	95
Onboard Transfer Date	4	96
Past Actual UIC	5	100
SRB (Selective Reenlistment Bonus) Indicator		
Received	1	105
Zone	1	106
Skill Indicator	1	107
Award Level	1	108

Data Elements	Length	Start
RQC (Recruit Quality Control Code)	2	109
Loss Date of Occurance	4	111
Loss Code Navy	3	115
Loss Code DOD	3	118

APPENDIX B

FORTRAN Program to Create File of Renormed AFQT Scores and Modified Data

```
C  THIS PROGRAM CREATES A FILE OF RENORMED AFQT SCORES, ELIMINATES
C  UNWANTED DATA ELEMENTS, PLACES PLUSES (+) ON FIRST RECORDS, AND
C  ASTERISKS (*) ON LAST

   REAL*8 A,B,SSN
   REAL *8 AFQTN,AFQTO,AFSD,ASTAR,AFQT
   INTEGER BLANK,STAR,PLUS,A29,B29,PERIOD
   DIMENSION A(28),B(28),SSN(2)
   DIMENSION AFQTN(100),AFQTO(100)
   DATA SFSD/'8010'/,ASTAR/'**'/
   DATA AFQTN/'  ','01','03','05','05','06','09','10','10','10',
  +           '11','11','12','12','12','12','13','14','14','15',
  +           '16','16','16','16','17','17','17','17','17','18',
  +           '18','18','19','19','19','21','21','23','23','23',
  +           '23','23','25','27','27','29','29','29','31','33',
  +           '33','33','33','33','35','35','35','35','38','38',
  +           '41','41','44','44','47','50','50','53','53','56',
  +           '56','58','58','58','60','62','62','65','65','67',
  +           '70','70','72','72','75','77','77','80','82','84',
  +           '84','84','86','87','89','91','93','95','99','**'/
   DATA AFQTO/'  ','01','03','05','06','07','09','1 ','10','11',
  +           '12','13','14','15','16','17','18','19','20','21',
  +           '22','23','24','25','26','27','28','29','30','31',
  +           '32','33','34','35','36','37','38','39','4 ','40',
  +           '41','42','43','44','45','46','47','48','49','50',
  +           '51','52','53','54','55','56','57','58','59','60',
  +           '61','62','63','64','65','66','67','68','69','70',
  +           '71','72','73','74','75','76','77','78','79','80',
  +           '81','82','83','84','85','86','87','88','89','90',
  +           '91','92','93','94','95','96','97','98','99','**'/
C
C
C
   DATA BLANK /'  '/,STAR/'*'/.PLUS/'+'/,PERIOD/'.'/
   ITOTAL=0
   ILAST=0
   IPER=0
   IPLUS=0
   LAST=BLANK
C
C  READ FIRST RECORD INTO ARRAY B
C
```

```
10    READ(1,1000) B
1000 FORMAT (A8,A1,A5,A1,1X,A1,1X,A4,A2,2X,4A1,A2,2A1,A2,2A1,4X,A2,4X,
     +A4,A1,8X,A4,4X,2A4,8X,A1,8X,A1,15X,A4,A3,A3)
      B-29=BLANK
      SSN(1)=B(1)
      SSN(2)=B(2)
C   READ NEXT RECORD INTO ARRAY A
20    READ (1,1000,END=999) A
      A29=BLANK
C
C   COMPARE SSN OF FIRST AND SECOND RECORD.
C   IF DIFFERENT, WRITE AN ASTERISK IN
C   CHARACTER POSITION 1 OF OUTPUT RECORD ELSE
C   WRITE A BLANK IN POSITION 1
C
C     LAST=BLANK
      IF (SSN(1).EQ. A (1).AND. SSN(2).EQ A(2)) GO TO 30
      A29=PLUS
      IF(B29.EQ.PLUS) PFLAG=1
      B29=STAR
C
C   WRITE OUTPUT RECORD FROM ARRAY B
C
30    CONTINUE
C   CONVERT AFQT SCORES
      AFQT=ASTAR
      IF(A(21).LT.AFSD) GO TO 35
      DO 33 I=1,100
      IF (A(7).EQ.AFQTO(I))AFQT=AFQTN(I)
33    CONTINUE
      A(7)=AFQT
35    CONTINUE
      IF (PFLAG.EQ.1) B29=PERIOD
      LAST=B29
      IF (ITOTAL.EQ.0) LAST=PLUS
C     WRITE (6,2001) LAST,B
      WRITE (2,2000) LAST,B
2000 FORMAT (A1,A8,A1,A5,2A1,A4,A2,4A1,A2,2A1,A2,2A1,A2,A4,A1,3A4,2A1,
     +A4,2A3)
2001 FORMAT(1X,A1,1X,A8,A1,1X,A5,1X,A1,1X,A1,1X,A4,1X,A2,1X,A1,1X,A1,1X
     +A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A4,1X,
     +A1,1X,A4,1X,A4,1X,A4,1X,A1,1X,A1,1X,A4,1X,A3,1X,A3,1X)
C   MOVE ARRAY A TO ARRAY B
      DO 40 I=1,28
         B(I)=A(1)
40    CONTINUE
      B29=A29
C   PREPARE FOR SSN CHECK AND COMPUTE TALLIES
      SSN(1)=B(1)
      SSN(2)=B(2)
      ITOTAL=ITOTAL+1
```

```
      IF(LAST.EQ.STAR) ILAST=ILAST+1
      IF(LAST.EQ.PLUS) IPLUS=IPLUS+1
      IF(LAST.EQ.PERIOD) IPER=IPER+1
      PFLAG=0
      GO TO 20
C
C  END OF INPUT FILE
C
999   LAST=STAR
      ILAST=ILAST+1
      ITOTAL=ITOTAL+1
C     WRITE(6,2001)LAST,B
      WRITE(2,2000)LAST,B
      WRITE(6,2002) ITOTAL
2002  FORMAT (1X,'TOTAL RECORDS = ',17)
      WRITE(6,2003) ILAST,IPLUS,IPER
2003  FORMAT (1X,'TOTAL = ',17,' IPLUS = ',17' IPER = ',17)
      STOP
```

APPENDIX C

FORTRAN Program to Create File of First Records

```
C  THIS PROGRAM CREATES A FILE OF +FIRST RECORDS AND THOSE WOMEN
C  STILL IN THE NAVY OR WHO HAVE ATTRITED
   REAL*8 A,ADSD
   LOGICAL*1 SEARCH,STAR,BLANK,LANK,LANK1,LANK2,PLUS
   DIMENSION A(2)
   DATA BLANK /' '/,STAR/'*'/,PLUS/'+'/,ADSD/'7801'/
   EQUIVALENCE (A(1),SEARCH),(A(27),LANK),(A(28),LANK1),(A(29),LANK2)
   ITOTAL=0
    IREC=0
C
C  READ EACH RECORD OF THE REDUCED MASTER FILE.
C  IF A(1) IS AN ASTERISK AND A(27) IS BLANK
C  WRITE THAT RECORD TO THE OUTPUT FILE
C
10   READ(1,1000,END=999) A
1000 FORMAT (A1,A8,A1,A5,2A1,A4,A2,4A1,A2,2A1,A2,2A1,A2,A4,A1,3A4,
    +2A1,A4,2A3)
C
     IREC=IREC+1
     IF (SEARCH.EQ.STAR.OR.SEARCH.EQ.BLANK) GO TO 10
     IF (A(22).GT.ADSD) GO TO 10
C
     WRITE(2,1000) A
     IF(REC.LT.100) WRITE(6,2000) A
2000 FORMAT(1X,A1,1X,A8,A1,1X,A5,1X,A1,1X,A1,1X,A4,1X,A2,1X,A1,1X,A1,
    +1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A4,1X,
    +A1,1X,A4,1X,A4,1X,A4,1X,A1,1X,A1,1X,A4,1X,A3,1X,A3,1X)
C
     ITOTAL=ITOTAL+1
     GO TO 10
C
C  END OF INPUT FILE
C
999  WRITE(6,2001) ITOTAL,IREC
2001 FORMAT (1X,'TOTAL OUTPUT RECORDS = ',17' IREC= 7,17)
     STOP
     END
```

APPENDIX D

FORTRAN Program to Create File of Women Who Are on Active Duty and Who Have Attrited

```
C  THIS PROGRAM CREATES A FILE OF *LAST RECORDS AND THOSE WOMEN WHO
C  HAVE ATTRITED FROM THE NAVY AND ARE ON ACTIVE DUTY
   REAL*8 A
   REAL*8 KCC,MDF,MDM,MND,L853,L942,L998,L999,LCODE1
   REAL*8 L813,JDG,JDK,JDM,KCF,KDG,KDM,KDS,JCC,MBK
   REAL*8 LBK,LBM,LDM,MCF,LBLANK,L952
   LOGICAL*1 SEARCH,STAR,BLANK,LANK,LANK1,LANK2,PLUS
   REAL*8 KEYO,KEY1
   DIMENSION A(29)
   DIMENSION LCODE1(12)
   DATA KCC /'KCC'/
   DATA MCF /'MCF'/
   DATA MDF /'MDF'/
   DATA MDM /'MDM'/
   DATA MND /'MND'/
   DATA L853 /'853'/
   DATA L942 /'942'/
   DATA L998 /'998'/
   DATA L999 /'999'/
   DATA L813 /'813'/,L952 /'952'/,LBLANK /'   '/
   DATA JDG /'JDG'/,JDK /'JDK'/,JDM /'JDM'/
   DATA KCF /'KCF'/,KDG /'KDG'/,KDM /'KDM'/
   DATA KDS /'KDS'/,JCC /'JCC'/,MBK /'MBK'/
   DATA LBK /'LBK'/,LBM /'LBM'/,LDM /'LDM'/
   DATA LCODE1 /'801','802','816','841','842','856',
  +            '932','933','943','831','998','999'/
   DATA BLANK /' '/,STAR/'*'/,PLUS/'+'/,KEYO/'0'/, KEY1/'1'/
   EQUIVALENCE (A(1),SEARCH),(A(27),LANK),(A(28),LANK1),(A(29),LANK2)
   ITOTAL=0
    IREC=0
C
C  READ EACH RECORD OF THE REDUCED MASTER FILE.
C  IF A(1) IS AN ASTERISK AND A(27) THRU A(29) SHOW THAT
C  THE INDIVIDUAL IS EITHER ON ACTIVE DUTY OR ATTRITED
C  THEN WRITE THAT RECORD TO THE OUTPUT FILE
C
10   READ(1,1000,END=999) A
1000 FORMAT (A1,A8,A1,A5,2A1,A4,A2,4A1,A2,2A1,A2,2A1,A2,A4,A1,3A4,
    +2A1,A4,2A3)
C
     IREC=IREC+1
     IF (SEARCH.EQ.PLUS.OR.SEARCH.EQ.BLANK) GO TO 10
     IF (A(22).GT.ADSD) GO TO 10
C
```

```
C  SKIP ALL RECORDS WITH LOSS CODES THAT DO NOT INDICATE ATTRITION
C
15   DO 20 I=1,12
     IF (A(28).EQ.LDODE1(I)) GO TO 10
20   CONTINUE
     IF (A(28).EQ.L853.AND.A(29).EQ.KCC) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.MDF) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.MDM) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.MND) GO TO 10
     IF (A(28).EQ.L998.AND.A(29).EQ.L999) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.JDG) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.JDK) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.JDM) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.KCC) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.KCF) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.KDM) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.KDM) GO TO 10
     IF (A(28).EQ.L813.AND.A(29).EQ.KDS) GO TO 10
     IF (A(28).EQ.L853.AND.A(29).EQ.JCC) GO TO 10
     IF (A(28).EQ.L853.AND.A(29).EQ.KDM) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.LBK) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.LBM) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.LDM) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.MBK) GO TO 10
     IF (A(28).EQ.L942.AND.A(29).EQ.MCF) GO TO 10
     IF (A(28).EQ.L952.AND.A(29).EQ.LBLANK) GO TO 10
C
C  IF FIELDS A(27) THRU A(29) ARE BLANK, A(1)=0. ELSE A(1)=1
C
     A(1)=KEY 1
     IF (LANK.EQ.BLANK.AND.LANK1.EQ.BLANK.AND.LANK2.EQ.BLANK)
    +A(1)=KEY0
C
     WRITE(2,1000) A
C    WRITE(6,2000) A
2000 FORMAT(1X,A1,1X,A8,A1,1X,A5,1X,A1,1X,A1,1X,A4,1X,A2,1X,A1,1X,A1,
    +1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A4,1X,
    +A1,1X,A4,1X,A4,1X,A4,1X,A1,1X,A1,1X,A4,1X,A3,1X,A3,1X)
C
     ITOTAL=ITOTAL+1
     GO TO 10
C
C  END OF INPUT FILE
C
999  WRITE(6,2001) ITOTAL,ITEC
2001 FORMAT (1X,'TOTAL OUTPUT RECORDS = ',17,' IREC= ',17)
     STOP
     END
```

APPENDIX E

FORTRAN Program to Create File of Last Records

```
C  THIS PROGRAM CREATES A FILE OF *LAST RECORDS AND THOSE WOMEN WHO
C  STILL IN THE NAVY
   REAL*8 A
   LOGICAL*1 SEARCH,STAR,BLANK,LANK,LANK1,LANK2,PLUS
   DIMENSION A(29)
   DATA BLANK /' '/,STAR/'*'/,PLUS/'+'/
   EQUIVALENCE (A(1),SEARCH),(A(27),LANK),(A(28),LANK1),(A(29),LANK2)
   ITOTAL=0
    IREC=0
C
C  READ EACH RECORD OF THE REDUCED MASTER FILE.
C  IF A(1) IS AN ASTERISK AND A(27) IS BLANK
C  WRITE THAT RECORD TO THE OUTPUT FILE
C
10   READ(1,1000,END=999) A
1000 FORMAT (A1,A8,A1,A5,2A1,A4,A2,4A1,A2,2A1,A2,2A1,A2,A4,A1,3A4,
    +2A1,A4,2A3)
C
     IREC=IREC+1
     IF (SEARCH.EQ.PLUS.OR.SEARCH.EQ.BLANK) GO TO 10
     IF (LANK.NE.BLANK) GO TO 10
     IF (LANK1.NE.BLANK) GO TO 10
     IF (LANK2.NE.BLANK) GO TO 10
C
     WRITE(2,1000) A
C    WRITE(6,2000) A
2000 FORMAT(1X,A1,1X,A8,A1,1X,A5,1X,A1,1X,A1,1X,A4,1X,A2,1X,A1,1X,A1,
    +1x,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A4,1X,
    +A1,1X,A4,1X,A4,1X,A4,1X,A1,1X,A1,1X,A4,1X,A3,1X,A3,1X)
C
     ITOTAL=ITOTAL+1
     GO TO 10
C
C  END OF INPUT FILE
C
999  WRITE(6,2001) ITOTAL,IREC
2001 FORMAT (1X,'TOTAL OUTPUT RECORDS = ',17,' IREC= ',17)
     STOP
     END
```

APPENDIX F

FORTRAN Program to Create File of Women Who Have Attrited from the Navy

```
C  THIS PROGRAM CREATES A FILE OF *LAST RECORDS AND THOSE WOMEN WHO
C  HAVE ATTRITED FROM THE NAVY
   REAL*8 A
   REAL*8 KCC,MDF,MDM,MND,L853,L942,L998,L999,LCODE1
   REAL*8 L813,JDG,JDK,JDM,KCF,KDG,KDM,KDS,JCC,MBK
   REAL*8 LBK,LBM,LDM,MCF,LBLANK,L952
   LOGICAL*1 SEARCH,STAR,BLANK,LANK,LANK1,LANK2,PLUS
   DIMENSION A(29)
   DIMENSION LCODE1(12)
   DATA KCC /'KCC'/
   DATA MCF /'MCF'/
   DATA MDF /'MDF'/
   DATA MDM /'MDM'/
   DATA MND /'MND'/
   DATA L853 /'853'/
   DATA L942 /'942'/
   DATA L998 /'998'/
   DATA L999 /'999'/
   DATA L813 /'813'/,L952 /'952'/,LBLANK /'   '/
   DATA JDG /'JDG'/,JDK /'JDK'/,JDM /'JDM'/
   DATA KCF /'KCF'/,KDG /'KDG'/,KDM /'KDM'/
   DATA KDS /'KDS'/,JCC /'JCC'/,MBK /'MBK'/
   DATA LBK /'LBK'/,LBM /'LBM'/,LDM /'LDM'/
   DATA LCODE1 /'801','802','816','841','842','856',
  +            '932','933','943','831','998','999'/
   DATA BLANK /' '/,STAR/'*'/,PLUS/'+'/,KEY0/'0'/, KEY1/'1'/
   EQUIVALENCE (A(1),SEARCH),(A(27),LANK),(A(28),LANK1),(A(29),LANK2)
   ITOTAL=0
    IREC=0
C
C  READ EACH RECORD OF THE REDUCED MASTER FILE.
C  IF A(1) IS AN ASTERISK AND A(27) IS BLANK
C  WRITE THAT RECORD TO THE OUTPUT FILE
C
10   READ(1,1000,END=999) A
1000 FORMAT (A1,A8,A1,A5,2A1,A4,A2,4A1,A2,2A1,A2,2A1,A2,A4,A1,3A4,
    +2A1,A4,2A3)
C
     IREC=IREC+1
     IF (SEARCH.EQ.PLUS.OR.SEARCH.EQ.BLANK) GO TO 10
     IF (LANK.EQ.BLANK.AND.LANK1.EQ.BLANK.AND.LANK2.EQ.BLANK) GO TO 10
C
```

```
C  SKIP ALL RECORDS WITH LOSS CODES THAT DO NOT INDICATE ATTRITION
C
15    DO 20 I=1,12
      IF (A(28).EQ.LDODE1(I)) GO TO 10
20    CONTINUE
      IF (A(28).EQ.L853.AND.A(29).EQ.KCC) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.MDF) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.MDM) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.MND) GO TO 10
      IF (A(28).EQ.L998.AND.A(29).EQ.L999) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.JDG) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.JDK) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.JDM) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.KCC) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.KCF) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.KDM) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.KDM) GO TO 10
      IF (A(28).EQ.L813.AND.A(29).EQ.KDS) GO TO 10
      IF (A(28).EQ.L853.AND.A(29).EQ.JCC) GO TO 10
      IF (A(28).EQ.L853.AND.A(29).EQ.KDM) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.LBK) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.LBM) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.LDM) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.MBK) GO TO 10
      IF (A(28).EQ.L942.AND.A(29).EQ.MCF) GO TO 10
      IF (A(28).EQ.L952.AND.A(29).EQ.LBLANK) GO TO 10
C
      WRITE(2,1000) A
C     WRITE(6,2000) A
2000 FORMAT(1X,A1,1X,A8,A1,1X,A5,1X,A1,1X,A1,1X,A4,1X,A2,1X,A1,1X,A1,
     +1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A1,1X,A1,1X,A2,1X,A4,1X,
     +A1,1X,A4,1X,A4,1X,A4,1X,A1,1X,A1,1X,A4,1X,A3,1X,A3,1X)
C
      ITOTAL=ITOTAL+1
      GO TO 10
C
C  END OF INPUT FILE
C
999   WRITE(6,2001) ITOTAL,ITEC
2001 FORMAT (1X,'TOTAL OUTPUT RECORDS = ',17,' IREC= ',17)
      STOP
      END
```

APPENDIX G

Ratings of Enlisted Women (Recruits)

Rate	Frequency	Percent
BM	1	0.003
QM	2	0.006
OS	6	0.019
TM	3	0.009
GMT	2	0.006
RM	44	0.137
CTT	1	0.003
CTA	10	0.031
CTO	5	0.016
CTR	1	0.003
CTI	2	0.006
YN	157	0.487
PN	33	0.102
DP	14	0.043
SK	34	0.106
DK	5	0.016
MS	48	0.149
IS	2	0.006
SH	6	0.019
RP	1	0.003
JO	3	0.009
PC	2	0.006
DM	1	0.003
MU	8	0.025
SN,SA,AND SR	24,396	75.705
MM	5	0.016
EN	7	0.022
HT	1	0.003
FN,FA,AND FR	1,134	3.519
EO	1	0.003
CM	1	0.003
BU	1	0.003
UT	1	0.003
CN,CA,AND CR	152	0.472
AD	9	0.028
AT	7	0.022
AO	1	0.003
AQ	1	0.003
AC	1	0.003
ABF	1	0.003
ABH	1	0.003
AE	2	0.006
AMH	2	0.006
AME	1	0.003

Rate	Frequency	Percent
PR	3	0.009
AG	6	0.019
AK	37	0.115
AZ	14	0.043
PH	1	0.003
AN,AA,AND AR	4,583	14.222
HM,HH,HA,AND HR	1,198	3.718
DT,DN,DA,AND DR	267	0.829
	32,225	100.000

APPENDIX H

Ratings of Enlisted Women (Active Duty)

Rate	Frequency	Percent
BM	106	0.318
MA	33	0.099
QM	36	0.108
SM	28	0.084
OS	491	1.474
TM	144	0.432
GMT	18	0.054
GMG	50	0.150
FTG	3	0.009
MN	19	0.057
ET	442	1.326
DS	84	0.252
IM	8	0.024
OM	10	0.030
NC	47	0.141
RM	2,259	6.779
CTT	323	0.969
CTA	319	0.957
CTM	190	0.570
CTO	422	1.266
CTR	261	0.783
CTI	15	0.045
YN	2,601	7.806
LN	62	0.186
PN	1,366	4.099
DP	1,118	3.355
SK	915	2.746
DK	292	0.876
MS	1,156	3.469
IS	120	0.360
SH	212	0.636
RP	94	0.282
JO	144	0.432
PC	96	0.288
LI	22	0.066
DM	79	0.237
MU	45	0.135
SN,SA,AND SR	6,989	20.974
MM	80	0.240
EN	255	0.765
MR	38	0.114
BT	11	0.033
EM	161	0.483
IC	74	0.222

Rate	Frequency	Percent
HT	145	0.435
PM	1	0.003
ML	3	0.009
FN,FA,AND FR	501	1.504
EA	8	0.024
CE	15	0.045
EO	38	0.114
CM	22	0.066
BU	29	0.087
SW	12	0.036
UT	23	0.069
CN,CA,AND CR	32	0.096
AD	386	1.158
AT	348	1.044
AX	29	0.087
AO	22	0.066
AQ	13	0.039
AC	465	1.395
ABE	18	0.054
ABF	14	0.042
ABH	44	0.132
AE	109	0.327
AMS	180	0.540
AMH	128	0.384
AME	32	0.096
PR	211	0.633
AG	450	1.350
TD	494	1.483
AK	931	2.794
AZ	497	1.492
ASE	76	0.228
ASH	33	0.099
ASM	58	0.174
PH	347	1.041
AN,AA,AND AR	1,636	4.910
HM,HH,HA,AND HR	3,846	11.542
DT,DN,DA,AND DR	888	2.665
	33,322	100.000

APPENDIX I

Stay/Shore: Ratings of Enlisted Women

Rate	Frequency	Percent
BM	76	0.256
MA	32	0.108
QM	28	0.094
SM	17	0.057
OS	312	1.051
TM	114	0.384
GMT	11	0.037
GMG	43	0.145
FTG	2	0.007
MN	10	0.034
ET	381	1.283
DS	72	0.243
IM	3	0.010
OM	7	0.024
NC	46	0.155
RM	1,912	6.441
CTT	224	0.755
CTA	270	0.910
CTM	156	0.526
CTO	341	1.149
CTR	160	0.539
CTI	13	0.044
YN	2,468	8.314
LN	59	0.199
PN	1,267	4.268
DP	1,021	3.439
SK	749	2.523
DK	265	0.893
MS	1,037	3.493
IS	118	0.398
SH	143	0.482
RP	92	0.310
JO	110	0.371
PC	74	0.249
LI	20	0.067
DM	76	0.256
MU	44	0.148
SN,SA,AND SR	6,442	21.701
MM	78	0.263
EN	210	0.707
MR	29	0.098
BT	11	0.037
EM	130	0.438
IC	54	0.182

Rate	Frequency	Percent
HT	133	0.448
ML	1	0.003
FN,FA,AND FR	460	1.550
EA	7	0.024
CE	7	0.025
EO	30	0.101
CM	18	0.061
BU	14	0.047
SW	9	0.030
UT	12	0.040
CN,CA,AND CR	32	0.108
AD	355	1.196
AT	317	1.068
AX	22	0.074
AO	17	0.057
AQ	13	0.044
AC	429	1.445
ABE	12	0.040
ABF	12	0.040
ABH	38	0.128
AE	100	0.337
AMS	161	0.542
AMH	118	0.398
AME	28	0.094
PR	199	0.670
AG	342	1.152
TD	492	1.657
AK	829	2.793
AZ	445	1.499
ASE	68	0.229
ASH	32	0.108
ASM	50	0.168
PH	331	1.115
AN,AA,AND AR	1,482	4.992
HM,HH,HA,AND HR	3,550	11.959
DT,DN,DA,AND DR	793	2.671
	29,685	100.000

APPENDIX J

Stay/Sea: Ratings of Enlisted Women

Rate	Frequency	Percent
BM	30	0.827
MA	1	0.028
QM	8	0.221
SM	11	0.303
OS	179	4.934
TM	30	0.827
GMT	7	0.193
GMG	7	0.193
FTG	1	0.028
MN	9	0.248
ET	61	1.681
DS	12	0.331
IM	5	0.138
OM	3	0.083
NC	1	0.028
RM	347	9.564
CTT	99	2.729
CTA	49	1.451
CTM	34	0.937
CTO	81	2.233
CTR	101	2.784
CTI	2	0.055
YN	131	3.611
LN	3	0.083
PN	99	2.729
DP	97	2.674
SK	166	4.576
DK	27	0.744
MS	118	3.252
IS	2	0.055
SH	69	1.902
RP	2	0.055
JO	33	0.910
PC	22	0.606
LI	2	0.055
DM	3	0.083
MU	1	0.028
SN,SA,AND SR	544	14.994
MM	2	0.055
EN	45	1.240
MR	9	0.248
EM	31	0.854
IC	20	0.551
HT	12	0.331

Rate	Frequency	Percent
PM	1	0.028
ML	2	0.055
FN,FA,AND FR	41	1.130
EA	1	0.028
CE	8	0.221
EO	8	0.221
CM	4	0.110
BU	15	0.413
SW	3	0.083
UT	11	0.303
AD	31	0.854
AT	31	0.854
AX	7	0.193
AO	5	0.138
AC	36	0.992
ABE	6	0.165
ABF	2	0.055
ABH	6	0.165
AE	9	0.248
AMS	19	0.524
AMH	10	0.276
AME	4	0.110
PR	12	0.331
AG	108	2.977
TD	2	0.055
AK	102	2.811
AZ	52	1.433
ASE	8	0.221
ASH	1	0.028
ASM	8	0.221
PH	16	0.441
AN,AA,AND AR	153	4.217
HM,HH,HA,AND HR	296	8.159
DT,DN,DA,AND DR	94	2.591
	3,628	100.000

APPENDIX K

Stay/Traditional: Ratings of Enlisted Women

Rate	Frequency	Percent
NC	47	0.198
RM	2,259	9.518
CTT	323	1.361
CTA	319	1.344
CTM	190	0.801
CTO	422	1.778
CTR	261	1.100
CTI	15	0.063
YN	2,601	10.959
LN	62	0.261
PN	1,366	5.755
DP	1,118	4.710
SK	915	3.855
DK	292	1.230
MS	1,156	4.870
IS	120	0.506
SH	212	0.893
RP	94	0.396
JO	144	0.607
PC	96	0.404
SN,SA,AND SR	6,989	29.994
HM,HN,HA,AND HR	3,846	16.204
DT,DN,DA,AND DR	888	3.741
	23,735	100.000

APPENDIX L

Stay/Non-Traditional: Ratings of Enlisted Women

Rate	Frequency	Percent
BM	106	1.106
MA	33	0.344
QM	36	0.376
SM	28	0.292
OS	491	5.122
TM	144	1.502
GMT	18	0.188
GMG	50	0.522
FTG	3	0.031
MN	19	0.198
ET	442	4.610
DS	84	0.876
IM	8	0.083
OM	10	0.104
LI	22	0.229
DM	79	0.824
MU	45	0.469
MM	80	0.834
EN	255	2.660
MR	38	0.396
BT	11	0.115
EM	161	1.679
IC	74	0.772
HT	145	1.512
PM	1	0.010
ML	3	0.031
FN,FA,AND FR	501	5.226
EA	8	0.083
CE	15	0.156
EO	38	0.396
CM	22	0.229
BU	29	0.302
SW	12	0.125
UT	23	0.240
CN,CA,AND CR	32	0.334
AD	386	4.026
AT	348	3.630
AX	29	0.302
AO	22	0.229
AQ	13	0.136
AC	465	4.850
ABE	18	0.188
ABF	14	0.146
ABH	44	0.459

Rate	Frequency	Percent
AE	109	1.137
AMS	180	1.878
AMH	128	1.335
AME	32	0.334
PR	211	2.201
AG	450	4.694
TD	494	5.153
AK	931	9.711
AZ	497	5.184
ASE	76	0.793
ASH	33	0.344
ASM	58	0.605
PH	347	3.619
AN,AA,AND AR	1,636	17.065
	9,587	100.000

APPENDIX M

Ratings of Enlisted Women Who Attrited

Rate	Frequency	Percent
BM	15	0.152
QM	9	0.091
SM	3	0.030
OS	108	1.096
TM	11	0.112
GMT	7	0.071
GMG	8	0.081
FTG	1	0.010
MN	4	0.041
ET	87	0.883
ETN	6	0.061
ETR	1	0 010
DS	16	0.162
IM	2	0.020
OM	1	0.010
NC	5	0.051
RM	543	5.509
CTT	59	0.599
CTA	63	0.639
CTM	35	0.355
CTO	73	0.741
CTR	78	0.791
CTI	3	0.030
YN	344	3.490
LN	3	0.030
PN	210	2.130
DP	117	1.187
SK	145	1.471
DK	29	0.294
MS	254	2.577
IS	18	0.183
SH	60	0.609
RP	3	0.030
JO	16	0.162
PC	19	0.193
LI	2	0.020
DM	14	0.142
MU	6	0.061
SN,SA,AND SR	4,187	42.477
MM	27	0.274
EN	47	0.477
MR	4	0.041
BT	3	0.030
EM	26	0.264

Rate	Frequency	Percent
IC	6	0.061
HT	21	0.213
FN,FA,AND FR	201	2.039
EA	2	0.020
CE	2	0.020
EO	7	0.071
CM	6	0.061
BU	6	0.061
SW	3	0.030
UT	3	0.030
CN,CA,AND CR	17	0.172
AD	98	0.994
ADR	12	0.122
AT	90	0.913
AX	12	0.122
AO	6	0.061
AQ	5	0.051
AC	64	0.649
ABE	2	0.020
ABF	5	0.051
ABH	9	0.091
AE	23	0.233
AMS	19	0.193
AMH	34	0.345
AME	5	0.051
PR	43	0.436
AG	74	0.751
TD	69	0.700
AK	186	1.887
AZ	96	0.974
ASE	5	0.051
ASH	11	0.112
ASM	7	0.071
PH	31	0.314
AN,AA,AND AR	924	9.374
HM,HH,HA,AND HR	882	8.948
DT,DN,DA,AND DR	199	2.019
	9,857	100.000

APPENDIX N

Attrite/Shore: Ratings of Enlisted Women

Rate	Frequency	Percent
BM	15	0.157
QM	9	0.094
SM	2	0.021
OS	91	0.955
TM	10	0.105
GMT	6	0.063
GMG	8	0.084
MN	3	0.031
ET	78	0.818
ETN	5	0.052
DS	15	0.157
IM	2	0.021
OM	1	0.010
NC	5	0.052
RM	502	5.266
CTT	46	0.483
CTA	53	0.556
CTM	32	0.336
CTO	64	0.671
CTR	64	0.671
CTI	1	0.010
YN	336	3.525
LN	3	0.031
PN	202	2.119
DP	109	1.144
SK	136	1.427
DK	26	0.273
MS	244	2.560
IS	18	0.189
SH	56	0.587
RP	3	0.031
JO	15	0.157
PC	18	0.189
LI	2	0.021
DM	14	0.147
MU	6	0.063
SN,SA,AND SR	4,129	43.317
MM	27	0.283
EN	46	0.483
MR	4	0.042
BT	3	0.031
EM	26	0.273
IC	5	0.052
HT	20	0.210

Rate	Frequency	Percent
FN,FA,AND FR	196	2.056
EA	2	0.021
CE	2	0.021
EO	7	0.073
CM	6	0.063
BU	6	0.063
SW	3	0.031
UT	3	0.031
CN,CA,AND CR	17	0.178
AD	95	0.997
ADR	11	0.115
AT	89	0.934
AX	12	0.126
AO	6	0.063
AQ	5	0.052
AC	62	0.650
ABE	2	0.021
ABF	5	0.052
ABH	9	0.094
AE	21	0.220
AMS	18	0.189
AMH	32	0.336
AME	5	0.052
PR	41	0.430
AG	65	0.682
TD	68	0.713
AK	174	1.825
AZ	92	0.965
ASE	3	0.031
ASH	11	0.115
ASM	7	0.073
PH	31	0.325
AN,AA,AND AR	911	9.557
HM,HH,HA,AND HR	863	9.054
DT,DN,DA,AND DR	192	2.014
	9,532	100.000

APPENDIX O

Attrite/Sea: Ratings of Enlisted Women

Rate	Frequency	Percent
SM	1	0.308
OS	17	5.231
TM	1	0.308
GMT	1	0.308
FTG	1	0.308
MN	1	0.308
ET	9	2.769
ETN	1	0.308
ETR	1	0.308
DS	1	0.308
RM	41	12.615
CTT	13	4.000
CTA	10	3.077
CTM	3	0.923
CTO	9	2.769
CTR	14	4.308
CTI	2	0.615
YN	8	2.462
PN	8	2.462
DP	8	2.462
SK	9	2.769
DK	3	0.923
MS	10	3.077
SH	4	1.231
JO	1	0.308
PC	1	0.308
SN,SA,AND SR	58	17.846
EN	1	0.308
IC	1	0.308
HT	1	0.308
FN,FA,AND FR	5	1.538
AD	3	0.923
ADR	1	0.308
AT	1	0.308
AC	2	0.615
AE	2	0.615
AMS	1	0.308
AMH	2	0.615
PR	2	0.615
AG	9	2.769
TD	1	0.308
AK	12	3.692
AZ	4	1.231
ASE	2	0.615

Rate	Frequency	Percent
AN,AA,AND AR	13	4.000
HM,HH,HA,AND HR	19	5.846
DT,DN,DA,AND DR	7	2.154
	325	100.000

APPENDIX P

Attrite/Traditional: Ratings of Enlisted Women

Rate	Frequency	Percent
NC	5	0.068
RM	543	7.393
CTT	59	0.803
CTA	63	0.858
CTM	35	0.477
CTO	73	0.994
CTR	78	1.062
CTI	3	0.041
YN	344	4.683
LN	3	0.041
PN	210	2.859
DP	117	1.593
SK	145	1.974
DK	29	0.395
MS	254	3.458
IS	18	0.245
SH	60	0.817
RP	3	0.041
JO	16	0.218
PC	19	0.259
SN,SA,AND SR	4,187	57.005
HM,HN,HA,AND HR	882	12.008
DT,DN,DA,AND DR	199	2.709
	7,345	100.000

APPENDIX Q

Attrite/Non-Traditional: Ratings of Enlisted Women

Rate	Frequency	Percent
BM	15	0.597
QM	9	0.358
SM	3	0.119
OS	108	4.299
TM	11	0.438
GMT	7	0.279
GMG	8	0.318
FTG	1	0.040
MN	4	0.159
ET	87	3.563
ETN	6	0.239
ETR	1	0.040
DS	16	0.637
IM	2	0.080
OM	1	0.040
LI	2	0.080
DM	14	0.557
MU	6	0.239
MM	27	1.075
EN	47	1.871
MR	4	0.159
BT	3	0.119
EM	26	1.035
IC	6	0.239
HT	21	0.836
FN,FA,AND FR	201	8.002
EA	2	0.080
CE	2	0.080
EO	7	0.279
CM	6	0.239
BU	6	0.239
SW	3	0.119
UT	3	0.119
CN,CA,AND CR	17	0.677
AD	98	3.901
ADR	12	0.478
AT	90	3.583
AX	12	0.478
AO	6	0.239
AQ	5	0.199
AC	64	2.548
ABE	2	0.080
ABF	5	0.199
ABH	9	0.358

Rate	Frequency	Percent
AE	23	0.916
AMS	19	0.756
AMH	34	1.354
AME	5	0.199
PR	43	1.712
AG	74	2.946
TD	69	2.747
AK	186	7.404
AZ	96	3.822
ASE	5	0.199
ASH	11	0.438
ASM	7	0.279
PH	31	1.234
AN,AA,AND AR	924	36.783
	2,512	100.000

APPENDIX R

DOD/Navy Loss Codes[a]

Code[b]	Reason	Status[c]
804 JFL	Disability Severence	Hon
805 JFM	Disability EPTES[d] No Severence Pay PEB Board	Hon
805 JFP	Disability Misconduct No Severence Pay	Hon
805 JFR	Disability Not EPTES No Severence Pay PEB[e] Board	Hon
805 KFN	Disability EPTES No Severence Pay Med[f] Board	Hon
807 KGM	Officer/Warrant Officer USN/USNR Commission	Hon
808 KGN	Officer/Warrant Officer Commission Other Service	Hon
813 JFC	Erroneous Enlistment, Reenlistment, Induction	Hon
813 JFF	Separation for Good and Sufficient Reasons	Hon
813 JFG	Action Taken by Various Naval Boards/Chief NMPC[g]	Hon
813 JFT	Obesity	Hon
813 JFV	Physical Conditon Interfereing with Performance of Duty	Hon
813 JHJ	Burden to Command--Substandard Performance	Hon
813 JHK	Substandard Personal Behavior	Hon
813 JND	Convenience of Government/Chief NMPC	Hon
813 KCM	Conscientious Objection	Hon
813 KCP	Alien	Hon
813 KDF	Pregnancy	Hon
813 KFC	Erroneous Enlistment, Reenlistment, Induction	Hon
813 KFV	Physical Condition Interfering with Performance of Duty	Hon
813 KND	Dependency Hardship, Convenience of Government	Hon
814 KDB	Hardship	Hon
814 KDH	Demonstrated Dependency	Hon
815 KFB	Minority	Hon
817 JND	Unsuitability--Inaptitude	Hon
818 GMB	Unsuitability--Personality Disorders	Hon
818 GMT	Unsuitability--Apathy, Defective Attitude	Hon
818 GML	Unsuitability--Homosexual Tendencies	Hon
818 JMB	Unsuitability--Personality Disorders	Hon
818 JMG	Unsuitability--Alcohol Abuse	Hon
818 JMH	Unsuitability--Financial Irresponsibility	Hon
818 JMJ	Unsuitability--Apathy, Defective Attitude	Hon
818 JML	Unsuitability--Homosexual Tendencies	Hon
818 JMP	Unsuitability--Unsanitary Habits	Hon
830 KFS	For Good of the Service	Hon
831 GKA	Misconduct--Frequent Involvement With Civil or Military Authorities	Hon
831 GKC	Misconduct--Homosexual Acts	Hon
831 GKG	Misconduct--Fraudulent Enlistment	Hon
831 GKJ	Misconduct--Shirking	Hon
831 HKA	Misconduct--Frequent Involvement With Civil or Military Authorities	Hon

Code	Reason	Status
831 HKC	Misconduct--Homosexual Acts	Hon
831 HKG	Misconduct--Fraudulent Enlistment	Hon
832 JPB	Drug Abuse Other Than Alcohol	Hon
844 JFL	Disability Severence Pay	Gen
845 JFM	Disability EPTES No Severence Pay PEB Board	Gen
845 JFP	Disability Misconduct No Severence Pay	Gen
845 KFN	Disability EPTES No Severence Pay Med Board	Gen
853 JFC	Erroneous Enlistment, Reenlistment, Induction	Gen
853 JFF	Separation for Good and Sufficient Reasons	Gen
853 JFG	Action Taken by Various Naval Boards/Chief NMPC	Gen
853 JFT	Obesity	Gen
853 JHJ	Burden to Command--Substandard Performance	Gen
853 JHK	Substandard Personal Behavior	Gen
853 JND	Convenience of Government/Chief NMPC	Gen
853 KCP	Alien	Gen
853 KDF	Pregnancy	Gen
853 KFC	Erroneous Enlistment, Reenlistment, Induction	Gen
853 KND	Dependency Hardship, Convenience of Government	Gen
854 KDH	Demonstrated Dependency	Gen
857 JND	Unsuitability--Inaptitude	Gen
858 GMB	Unsuitability--Personality Disorders	Gen
858 GMG	Unsuitability--Alcohol Abuse	Gen
858 GMJ	Unsuitability--Apathy, Defective Attitude	Gen
858 JMB	Unsuitability--Personality Disorders	Gen
858 JMG	Unsuitability--Alcohol Abuse	Gen
858 JMJ	Unsiutability--Apathy, Defective Attitude	Gen
858 JML	Unsuitability--Homosexual Tendencies	Gen
858 JMP	Unsuitability--Unsanitary Habits	Gen
870 KFS	For Good of the Service	Gen
871 GKA	Misconduct--Frequent Involvement With Civil or Military Authorities	Gen
871 GKB	Misconduct--Convicted by Civil Court	Gen
871 GKC	Misconduct--Homosexual Acts	Gen
871 GKF	Misconduct--Unauthorized Absence One Year or More	Gen
871 GKG	Misconduct--Fraudulent Enlistment	Gen
871 GKJ	Misconduct--Shirking	Gen
871 GKK	Misconduct--Drug Abuse	Gen
871 HKA	Misconduct--Frequent Involvement With Civil or Military Authorities	Gen
871 HKB	Misconduct--Convicted by Civil Court	Gen
871 HKC	Misconduct--Homosexual Acts	Gen
871 HKE	Misconduct--Failure to Pay Depts	Gen
871 HKG	Misconduct--Fraudulent Enlistment	Gen
871 HKK	Misconduct--Drug Abuse	Gen
887 KFS	For Good of the Service	UD
888 GKA	Misconduct--Frequent Involvement With Civil or Military Authorities	UD
888 GKB	Misconduct--Convicted by Civil Court	UD
888 GKK	Misconduct--Drug Abuse	UD

Code	Reason	Status
888 HKA	Misconduct--Frequent Involvement With Civil or Military Authorities	UD
888 HKB	Misconduct--Convicted by Civil Court	UD
888 HKK	Misconduct--Drug Abuse	UD
901 JJD	Conviction Special Court Martial	BCD
902 JJD	Conviction General Court Martial	BCD/DD
911 JJD	Conviction General Court Martial	BCD/DD
942 LND	Convenience of the Government	Hon
942 MDG	Custody of Minor Child/Parenthood	Hon
944 MDB	Hardship	Hon
951	Desertion	-
952 885	Death	-
952 890	Death	-
952 891	Death	-
952 892	Death	-
952 894	Death	-
952 895	Death	-
952 897	Death	-
952 898	Death	-
952 899	Death	-
954 KGM	Officer/Warrant Officer USN/USNR Commission	Hon
956	Aviation Officer Candidate	Hon
957	Officer Candidate	Hon
958 KGU	Enter Naval Academy	Hon
959 KGX	Enter Naval Reserve Officer Program	Hon

[a]The three digits refer to the Navy Loss Code while the three letters refer to Department of Defense Loss Codes.

[b]DOD codes starting with G = involuntary discharge (Board Action); DOD codes starting with H = involuntary discharge (in lieu of further board processing; DOD codes starting with J = involuntary discharge; DOD codes starting with K = voluntary discharge; DOD codes starting with L = involuntary release or transfer; DOD codes starting with M = voluntary release or transfer.

[c]Hon = Honorable Discharge; Gen = General Discharge; UD = Undesirable discharge; BCD = Bad Conduct Discharge; DD = Dishonorable Discharge.

[d]Existing prior to entry service.

[e]Physical Evaluation Board.

[f]Medical Board.

[g]Naval Military Personnel Command.

APPENDIX S

Attrition by Rank and Rate

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
BM	0	0	5	10	0	0	0	15 0.15
QM	0	0	1	4	2	2	0	9 0.09
SM	0	0	0	1	2	0	0	3 0.03
CS	0	0	18	29	42	16	3	108 1.10
TM	0	0	0	0	4	4	3	11 0.11
GMT	0	0	2	1	2	2	0	7 0.07
GMG	0	0	1	1	4	2	0	8 0.08
FTG	0	0	0	1	0	0	0	1 0.01
MN	0	0	0	1	2	1	0	4 0.04
ET	2	1	19	60	2	3	0	87 0.88
ETN	0	0	2	3	1	0	0	6 0.06
ETR	0	0	1	0	0	0	0	1 0.01
DS	0	2	8	5	1	0	0	16 0.16
IM	0	0	0	1	0	1	0	2 0.02

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
OM	0	0	0	10	0	0	1	1 0.01
NC	0	5	0	0	0	0	0	5 0.05
RM	1	1	87	194	150	88	22	543 5.51
CTT	0	0	15	18	19	5	2	59 0.60
CTA	0	0	11	28	15	8	1	63 0.64
CTM	0	0	8	26	1	0	0	35 0.36
CTC	0	0	11	31	19	11	1	73 0.74
CTR	0	0	5	35	30	8	0	78 0.79
CTI	0	0	1	1	1	0	0	3 0.03
YN	2	13	91	126	63	37	11	343 3.48
LN	0	1	2	0	0	0	0	3 0.03
PN	0	5	45	70	54	25	11	210 2.13
DP	0	1	17	45	30	14	10	117 1.19
SK	0	0	22	54	31	24	14	145 1.47
DK	0	0	5	12	8	3	1	29 0.29
MS	0	0	7	49	88	69	41	254 2.58

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
IS	0	0	5	5	8	0	0	18 0.18
SH	0	0	4	19	19	11	7	60 0.61
RP	0	0	0	0	1	2	0	3 0.03
JO	0	2	3	7	2	2	0	16 0.16
PC	0	0	0	9	6	2	2	19 0.19
LI	0	0	1	1	0	0	0	2 0.02
DM	0	0	3	7	4	0	0	14 0.14
MU	0	0	0	5	1	0	0	6 0.06
SN,SR, AND SA	0	0	0	0	900	804	2482	4186 42.48
MM	0	0	0	21	4	0	1	26 0.26
EN	0	0	1	7	11	15	13	47 0.48
MR	0	0	0	0	3	0	1	4 0.04
BT	0	0	1	1	0	0	1	3 0.03
EM	0	0	2	11	11	1	1	26 0.26
IC	0	0	0	2	3	1	0	6 0.06
HT	0	0	1	4	6	8	2	21 0.21

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
FN,FA, AND FR	0	0	0	0	39	52	110	201 2.04
EA	0	0	0	0	1	1	0	2 0.02
CE	0	0	0	0	2	0	0	2 0.02
EO	0	0	0	1	2	2	2	7 0.07
CM	0	0	0	0	1	3	2	6 0.06
BU	0	0	0	0	2	4	0	6 0.06
SW	0	0	0	0	1	2	0	3 0.03
UT	0	0	0	0	1	1	1	3 0.03
CN,CA, AND CR	0	0	0	0	1	3	13	17 0.17
AD	0	0	6	25	40	19	8	98 0.99
ADR	0	0	1	5	4	2	0	12 0.12
AT	0	3	34	38	11	2	2	90 0.91
AX	0	1	6	4	1	0	0	12 0.12
AO	0	0	0	2	2	1	1	6 0.06
AQ	0	1	2	2	0	0	0	5 0.05
AC	0	1	15	23	21	4	0	64 0.65

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
ABE	0	0	0	0	1	1	0	2 0.02
ABF	0	0	1	1	1	0	2	5 0.05
ABH	0	0	2	2	3	1	1	9 0.09
AE	0	0	5	3	12	2	1	23 0.23
AMS	0	0	0	7	7	4	1	19 0.19
AMH	0	0	1	13	10	6	4	34 0.35
AME	0	0	0	3	2	0	0	5 0.05
PR	0	0	11	10	14	6	2	43 0.44
AG	0	2	10	30	24	6	2	74 0.75
TD	0	3	11	24	23	7	1	69 0.70
AK	0	0	15	91	39	31	9	185 1.88
AZ	0	9	11	46	20	13	6	96 0.97
ASE	0	0	0	1	3	1	0	5 0.05
ASH	0	0	0	3	4	3	1	11 0.11
ASM	0	0	0	1	4	2	0	7 0.07
PH	1	2	4	10	7	4	3	31 0.31

Rate	Paygrade							Total
	E7	E6	E5	E4	E3	E2	E1	
AN,AA, AND AR	0	0	0	0	206	242	476	924 9.38
HM,HN, HA,AND HR	1	12	141	276	248	110	94	882 8.95
DT,DN, DA,AND DR	1	1	15	66	58	36	22	199 2.02
TOTAL	8	57	696	1592	2365	1740	3395	9853
	0.08	0.58	7.06	16.16	24.00	17.66	34.46	100.0

APPENDIX T

Attrite Dates for E-1's

Loss Date	Frequency	Percent
1977	65	2.738
1978	479	20.177
1979	759	31.971
1980	772	32.519
1981	299	12.595
	2,374	100.000

LIST OF REFERENCES

1. Binken, M. and Bach, S., Women in the Military, Brookings Institute, Washington, D.C., 1977.

2. Greene, Jr., J. M., Utilization of Women in the Navy: A Study of Historic and Current Employment Practices, Monterey, California, Master's Thesis, Naval Postgraduate School, June 1980.

3. Hinsdale, K., Collier, B., and Johnson, J. D., Navy Enlisted Women In Traditional and Nontraditional Jobs, (ONR TR A), Albion, Michigan, Validated Instruction Associates, August 1978.

4. Elster, R. S., (ed.), Readings in Gender Integration of the Military, (NPRDC TR 80, unpublished report in progress), San Diego, California, Navy Personnel Research and Development Center.

5. Borack, J. I. and Gay, K. W., The Enlisted Survival Tracking File (STF) (NPRDC TR 81, Unpublished report in progress), San Diego, California, Naval Pesonnel Research and Development Center.

6. Craster, J., Personal Communication Concerning Defense Manpower Data Center, FY 1978 Navy Enlisted Male Cohort Data, 13 November 1981.

7. Helwig, J. T. and Council, K. A. (ed.), SAS User's Guide, 1979 edition, SAS Institute, Cary, North Carolina, 1979.

8. Sutherland, P. K., Utilization of Women by the Navy, Naval Postgraduate School Term Paper MN 3111, March 1981.

9. Cooper, R. V. L., (ed.), Defense Manpower Policy: Presentations from the 1976 Rand Conference on Defense Manpower, (R-2396-ARPA), Rand, Santa Monica, California, December 1978.

10. Thomason, J.S., First-Term Survival and Reenlistment Chances for Navy Ratings and a Strategy for Their Use, (CRG 382), Alexandria, Virginia, Center for Naval Analyses, May 1979.

11. Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., and Bent, D. H., Statistical Package for the Social Sciences, Second Edition, McGraw-Hill, New York, 1975.

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